

<http://www.cas.org/legal/infopolicy.html>

=> S GARLIC EXTRACTS

10685 GARLIC

82 GARLICS

10710 GARLIC

(GARLIC OR GARLICS)

53644 EXTRACTS

247660 EXTs

247660 EXTs

269480 EXTRACTS

(EXTRACTS OR EXTs)

L1 211 GARLIC EXTRACTS

(GARLIC(W)EXTRACTS)

=> S L1 AND BIOPESTICIDE

434 BIOPESTICIDE

378 BIOPESTICIDES

686 BIOPESTICIDE

(BIOPESTICIDE OR BIOPESTICIDES)

L2 0 L1 AND BIOPESTICIDE

=> S L1 AND PESTICIDE

69736 PESTICIDE

73105 PESTICIDES

95555 PESTICIDE

(PESTICIDE OR PESTICIDES)

L3 2 L1 AND PESTICIDE

=> D L3

L3 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2008 ACS on STN

AN 2007:823277 CAPLUS Full-text

DN 147:449728

TI Process for incorporation of garlic into resins and fabrication of agricultural plastics

IN Gil Caraveo, Judith

PA Orrantia Caraveo, Oscar Antonio, Mex.

SO Mex. Pat. Appl., 7pp.

CODEN: MXXXA3

DT Patent

LA Spanish

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PI	MX 2005PA04613	A	20061030	MX 2005-PA4613	
	20050429				
PRAI	MX 2005-PA4613		20050429		

=> S L1 AND INSECTICIDE

80015 INSECTICIDE

94950 INSECTICIDES

116636 INSECTICIDE

(INSECTICIDE OR INSECTICIDES)

L4 3 L1 AND INSECTICIDE

=> D L4

L4 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2008:284429 CAPLUS Full-text
DN 148:278286
TI Insecticidal and disinfectant composition from garlic
extracts associated with benzalkonium chloride and pyrethroids
IN Mbonimpa, Denis
PA Fr.
SO Fr. Demande, 7pp.
CODEN: FRXXBL
DT Patent
LA French
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PI	FR 2905230	A1	20080307	FR 2006-7590	
	20060829				
PRAI	FR 2006-7590		20060829		

<http://www.cas.org/legal/infopolicy.html>

=> s garlic

10685 GARLIC
82 GARLICS
L1 10710 GARLIC
(GARLIC OR GARLICS)

=> s l1 and insecticide

80015 INSECTICIDE
94950 INSECTICIDES
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(INSECTICIDE OR INSECTICIDES)
L2 179 L1 AND INSECTICIDE

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22961967 PY<2003
4500767 AY<2003
L3 102 L2 AND (PY<2003 OR AY<2003)

=> d l3

L3 ANSWER 1 OF 102 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2007:1363508 CAPLUS Full-text
DN 148:13021
TI Soap product with absorbent composition of matter for controlled
release
of an active ingredient and manufacturing soap
IN Jassan, Genaro Casas; De Almeida, Jose Represas
PA Aproa Asesores S.C., Mex.
SO U.S. Pat. Appl. Publ., 7pp., Cont.-in-part of U.S. Ser. No.
250,306.
CODEN: USXXCO
DT Patent

LA English

FAN.CNT 3

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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WO 2001021225	A2	20010329	WO 2000-MX34	
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WO 2001021225	A3	20020516		
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LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT,				
RO, RU,				
SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US,				
UZ, VN,				
YU, ZA, ZW				
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US 6635344	B1	20031021	US 2001-856196	
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US 20040078048	A1	20040422	US 2003-642920	
20030818				
US 7163737	B2	20070116		
US 20060078733	A1	20060413	US 2005-250306	
20051014				
US 7247377	B2	20070724		
PRAI MX 1999-8523	A	19990917		
WO 2000-MX34	A	20000913		
US 2001-856196	A2	20010904		
US 2003-642920	A2	20030818		
US 2005-250306	A2	20051014		

<http://www.cas.org/legal/infopolicy.html>

=> s garlic

10689 GARLIC

82 GARLICS

L1 10714 GARLIC

(GARLIC OR GARLICS)

=> s l1 and insecticide

80024 INSECTICIDE

94959 INSECTICIDES

116648 INSECTICIDE

(INSECTICIDE OR INSECTICIDES)

L2 180 L1 AND INSECTICIDE

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      4500961 AY<2003
      3969407 PRY<2003
L3      105 L2 AND (PY<2003 OR AY<2003 OR PRY<2003)
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L3      ANSWER 105 OF 105  CAPLUS  COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER:      1906:138994  CAPLUS  Full-text
DOCUMENT NUMBER:      0:138994
TITLE:      COMBINED FERTILIZER AND INSECTICIDE
INVENTOR(S):      Vinson, Peter
PATENT ASSIGNEE(S):      Elliott, Ebenezer, USA
SOURCE:      U.S.
      CODEN: USXXAM
DOCUMENT TYPE:      Patent
LANGUAGE:      English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:
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PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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US 349289	A	18860914	US 1886-197003	

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18860405 <--
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AB      To all whom it may concern: Be it known that I, PETER VINSON, a
citizen of the United States, residing at Elrod, in the county of
Ripley and State of Indiana, have invented a new and useful
Composition of Matter to be Used as a Protection to Planted Grain
and as a Fertilizer therefor, as more fully hereinafter specified.
My improved composition consists of the following ingredients,
combined in the following proportions, or thereabout, viz: cattle
dung or excrement, fifty pounds; horse dung or excrement, thirty
pounds; sheep dung or excrement, ten pounds; fowl dung or
excrement, ten pounds; blue vitriol, (sulphate of copper), two
ounces; saltpeter, (nitrate of potash), two ounces; slaked lime,
twenty-five pounds; leached ashes, twenty-five pounds; Cayenne
pepper, (capsicum), pulverized, one ounce; black pepper,
pulverized, one ounce; ginger, pulverized, one ounce; mustard-
seed, one ounce; garlic, dried and pulverized, one-fourth of an
ounce. The ingredients, in the proportions above named and
prepared as stated, are thoroughly mixed for use. The animal
excrements are thoroughly dried, and ground separately from the
other materials, and kept apart until ready for use, when the
mixture of the whole is effected in any suitable manner, and the
composition is placed in an ordinary drill and drilled with the
grain to be dropped. When prepared as described, the compound not
only acts as a fertilizer to stimulate and support the vegetation
after the grain has germinated, but acts as a protector of the
grain by preventing the ravages of insects upon the same before
and during the process of germination.
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=> d ibib abs 13 1-5
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L3 ANSWER 1 OF 105 CAPLUS COPYRIGHT 2008 ACS on STN
 ACCESSION NUMBER: 2007:1450137 CAPLUS Full-text
 DOCUMENT NUMBER: 148:62071
 TITLE: Anti-infection augmentation foamable
 compositions and
 kit and uses thereof
 INVENTOR(S): Tamarkin, Dov; Friedman, Doron; Eini, Meir
 PATENT ASSIGNEE(S): Foamix Ltd., Israel
 SOURCE: U.S. Pat. Appl. Publ., 43pp., Cont.-in-part of
 U.S.

Ser. No. 448,490.

CODEN: USXXCO

DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 31
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 20070292355	A1	20071220	US 2007-732547	
20070404 <--				
WO 2004037225	A2	20040506	WO 2003-IB5527	
20031024 <--				
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US 20050031547	A1	20050210	US 2004-835505	
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US 20050069566	A1	20050331	US 2004-911367	
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US 20050074414	A1	20050407	US 2004-922358	
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AU 2004313285	A1	20050929	AU 2004-313285	
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US 20050186142	A1	20050825	US 2005-41921	
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ZA 2005003298	A	20060830	ZA 2005-3298	
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US 20060140984	A1	20060629	US 2005-532618
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AU 2006201878	A1	20070927	AU 2006-201878
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US 20060269485	A1	20061130	US 2006-448490
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AU 2006339311	A2	20070907	AU 2006-339311
20060607			
AU 2006339311	A1	20070907	
CA 2611577	A1	20070907	CA 2006-2611577
20060607			
WO 2007099396	A2	20070907	WO 2006-IB3975
20060607			
WO 2007099396	A3	20080313	
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EP 1919449	A2	20080514	EP 2006-847249
20060607			
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BA, HR, MK, RS			
US 20070280891	A1	20071206	US 2006-645444
20061226			
US 20080050317	A1	20080228	US 2007-894668
20070820			
IN 2007KN04925	A	20080704	IN 2007-KN4925
20071218			
PRIORITY APPLN. INFO.:			IL 2002-152486 A
20021025 <--			US 2002-429546P P
20021129 <--			US 2003-492385P P
20030804			US 2003-497648P P
20030825			

20031024	WO 2003-IB5527	W
20031216	US 2003-530015P	P
20040428	US 2004-835505	A2
20040804	US 2004-911367	A2
20040820	US 2004-922358	A2
20050124	US 2005-41921	A2
20050607	US 2005-688244P	P
20051222	US 2005-532618	A2
20060404	US 2006-789186P	P
20060607	US 2006-448490	A2
20061129	US 2006-861620P	P
20070112	US 2007-880434P	P
20060607	WO 2006-IB3975	W

AB This invention relates to anti-infective foamable composition and kits include a foamable carrier; a therapeutically safe and effective concentration of an anti-infective agent; an augmenting agent selected from the group consisting of a keratolytic agent and a skin penetration enhancer; and a propellant. The composition is housed in a container and upon release is expandable to form a breakable foam. The foamable carrier is selected to generate a foam of good or excellent quality in the presence of the augmenting agent and anti-infective agent. Methods for treating, alleviating or preventing a disorder of the skin, a body cavity or mucosal surface, wherein the disorder involves a fungal, bacterial or viral infection as one of its etiol. factors, is described. Thus, foamable composition was prepared containing PEG 400 91.65%, hydroxypropyl cellulose 0.475, steareth 2 1.88%, salicylic acid 5.0%, and ciclopiroxolamine 1.0%.

L3 ANSWER 2 OF 105 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2007:1363508 CAPLUS Full-text

DOCUMENT NUMBER: 148:13021

TITLE: Soap product with absorbent composition of matter for

controlled release of an active ingredient and manufacturing soap

INVENTOR(S): Jassan, Genaro Casas; De Almeida, Jose Represas

PATENT ASSIGNEE(S): Aproa Asesores S.C., Mex.

SOURCE: U.S. Pat. Appl. Publ., 7pp., Cont.-in-part of U.S.

Ser. No. 250,306.

CODEN: USXXCO

DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 3
 PATENT INFORMATION:

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19990917 <--				
WO 2001021225	A2	20010329	WO 2000-MX34	
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WO 2001021225	A3	20020516		
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GM, HR,				
HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,				
LS, LT,				
LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT,				
RO, RU,				
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RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE,				
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AB The absorbent composition of matter comprises a carrier consisting essentially of particles obtained from a woody ring and a chaff ring of a corncob having moisture content <10%, and an active ingredient mixed with the carrier. The absorbent is dispersed with soap base of the soap product, absorbing malodor from the soap base, while controlling the release of the active ingredient. The carrier and active ingredient can be dispersed in the soap base before the soap base is melted. Alternatively, the carrier

without the active ingredient can be dispersed in the soap base. Subsequently, the soap base is melted and the active ingredient is added to the melted soap base.

L3 ANSWER 3 OF 105 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2007:1279379 CAPLUS Full-text
DOCUMENT NUMBER: 147:463454
TITLE: Phytoncide composition with disease
preventive, repellent, and phytotonic effects for
agricultural use and procedure for obtaining the same
INVENTOR(S): Berni Medina, Jorge Enrique
PATENT ASSIGNEE(S): Mex.
SOURCE: Mex. Pat. Appl., 16pp.
CODEN: MXXXA3
DOCUMENT TYPE: Patent
LANGUAGE: Spanish
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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MX 9303660	A	20011031	MX 1993-3660	
19930618 <--				
PRIORITY APPLN. INFO.:			MX 1993-3660	
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AB	A composition for controlling insect pests and diseases of crop plants contains garlic 0.100-0.200, chrysanthemum 0.020-0.050, rue 0.010-0.040, biostimulant 0.015, and antioxidant 0.001 kg/L and ultrafiltered water. The biodegradable composition is obtained by a multistep process that includes extraction of freshly harvested plant materials, extracting the liqs., prefiltration, separation of the pulp and emptying the solns. of all the ingredients in a wooden tank, and biodynamization.			

L3 ANSWER 4 OF 105 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2007:88149 CAPLUS Full-text
DOCUMENT NUMBER: 146:178833
TITLE: Nonflammable insecticidal foams for treating
parasite infestations
INVENTOR(S): Tamarkin, Dov; Friedman, Doron; Eini, Meir
PATENT ASSIGNEE(S): Foamix Ltd., Israel
SOURCE: U.S. Pat. Appl. Publ., 16pp., Cont.-in-part of
U.S. Ser. No. 532,618.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 31
PATENT INFORMATION:

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US 20080152596	A1	20080626	US 2007-894767	
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			US 2007-899176P	P
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			US 2007-811140	A1

20070607

AB Safe and effective foamable compns. for treating a subject infested with a parasitic arthropod or for preventing infestation include a first insecticide; ≥ 1 organic carrier selected from a hydrophobic carrier, a polar solvent, an emollient and mixts. thereof at 2-50% by weight; .apprx.0.1-5% by weight of a surface-active agent; .apprx.0.01-5% by weight of ≥ 1 polymeric agent

selected from a bioadhesive agent, a gelling agent, a film-forming agent and a phase change agent; and a liquefied or compressed gas propellant at .apprx.3-25% by weight of the total composition. The organic carrier may comprise a second insecticide and(or) a potent solvent. Thus, a foamable insecticide composition containing permethrin (1%), star anise oil (2.00% weight/weight as second insecticide) and diisopropyl adipate and di-Me isosorbide as potent solvents was safe and effective in the treatment of head lice (Pediculosis capitis) in pediatric patients.

L3 ANSWER 5 OF 105 CAPLUS COPYRIGHT 2008 ACS on STN
 ACCESSION NUMBER: 2007:88128 CAPLUS Full-text
 DOCUMENT NUMBER: 146:168847
 TITLE: Foamable composition combining a polar solvent
 and a hydrophobic carrier
 INVENTOR(S): Tamarkin, Dov; Friedman, Doron; Eini, Meir;
 Besonov, Alex
 PATENT ASSIGNEE(S): Foamix Ltd., Israel
 SOURCE: U.S. Pat. Appl. Publ., 20pp., Cont.-in-part of
 U.S. Ser. No. 532,618.
 CODEN: USXXCO
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 31
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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US 20070020213	A1	20070125	US 2006-488989	
20060719 <--				
WO 2004037225	A2	20040506	WO 2003-IB5527	
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WO 2004037225	A3	20041229		
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SK, TR,				
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US 20050031547	A1	20050210	US 2004-835505
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US 20050069566	A1	20050331	US 2004-911367
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US 20050074414	A1	20050407	US 2004-922358
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AU 2004313285	A1	20050929	AU 2004-313285
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US 20050271596	A1	20051208	US 2005-124676
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US 20060140984	A1	20060629	US 2005-532618
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WO 2007085902	A2	20070802	WO 2006-IB4119
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US 20070280891	A1	20071206	US 2006-645444
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US 20070292359	A1	20071220	US 2007-811140
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WO 2008038140	A2	20080403	WO 2007-IB3463
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TM, TN,	TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW
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AM, AZ,	BY, KG, KZ, MD, RU, TJ, TM, AP, EA, EP, OA
	US 20080050317 A1 20080228 US 2007-894668
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PRIORITY APPLN. INFO.:	IL 2002-152486 A
20021025 <--	
	US 2002-429546P P
20021129 <--	
	US 2003-492385P P
20030804	
	US 2003-497648P P
20030825	
	WO 2003-IB5527 W
20031024	
	US 2003-530015P P
20031216	
	US 2004-835505 A2
20040428	
	US 2004-911367 A2
20040804	
	US 2004-922358 A2
20040820	
	US 2005-124676 A2
20050509	
	US 2005-700702P P
20050719	
	US 2005-532618 A2
20051222	
	US 2005-78902 A2
20050311	
	US 2005-696878P P
20050706	
	US 2006-781868P P
20060313	
	US 2006-811627P P
20060607	
	US 2006-481596 A2
20060706	
	US 2006-482596 A
20060707	
	US 2006-488989 A2
20060719	
	US 2007-897638P P
20070126	

	US 2007-899176P	P
20070202		
	US 2007-717897	A2
20070313		
	US 2007-811140	A1
20070607		

AB The present invention relates to a foamable vehicle or cosmetic or pharmaceutical composition, comprising: an organic carrier, at 10-0% by weight, wherein the organic carrier concurrently comprises: (i) at least one hydrophobic organic carrier, and (ii) at least one polar solvent; (2) at least one surfactant; (3) water; and (4) at least one liquefied or compressed gas propellant at 3-25% by weight of the total composition. The present invention further provides a method of treating, alleviating or preventing a disorder of mammalian subject, comprising administering the above-mentioned compns. to an afflicted target site.

=> d ibib abs 13 50-55

L3 ANSWER 50 OF 105 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1996:180661 CAPLUS Full-text

DOCUMENT NUMBER: 124:253322

ORIGINAL REFERENCE NO.: 124:46769a,46772a

TITLE: Exemption of certain pesticide substances from Federal Insecticide, Fungicide, and Rodenticide Act requirements

CORPORATE SOURCE: United States Environmental Protection Agency, Washington, DC, 20460, USA

SOURCE: Federal Register (1996), 61(45), 8876-9, 6 Mar 1996

CODEN: FEREAC; ISSN: 0097-6326

PUBLISHER: Superintendent of Documents

DOCUMENT TYPE: Journal

LANGUAGE: English

AB This rule establishes an exemption from regulation under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) for certain pesticides. EPA has determined that these pesticides, under certain conditions, are of a character not necessary to be regulated under FIFRA in order to carry out the purposes of the Act. EPA has concluded that exemption of products covered by this final rule will not pose unreasonable risks to public health or the environment and will, at the same time, relieve producers of the burden associated with regulation. Pesticidal products that do not meet the conditions of this final rule will continue to be regulated under FIFRA.

L3 ANSWER 51 OF 105 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1996:107960 CAPLUS Full-text

DOCUMENT NUMBER: 124:230431

ORIGINAL REFERENCE NO.: 124:42709a,42712a

TITLE: Pesticide residues in foodstuffs in Pakistan: Organochlorine, organophosphorus and

pyrethroid

insecticides in fruits and vegetables
AUTHOR(S): Masud, Syed Zafar; Hasan, Nusrat
CORPORATE SOURCE: Pesticide Research Laboratory, Tropical
Agricultural Research Institute, Karachi, PC75270, Pak.
SOURCE: Environmental Toxicology Assessment (1995),
269-79. Editor(s): Richardson, Mervyn.
Taylor & Francis: London, UK.
CODEN: 62IOA2
DOCUMENT TYPE: Conference
LANGUAGE: English

AB Organochlorine, organophosphorus and pyrethroid insecticides in
fruits and vegetables of Karachi and Islamabad markets and
grower's fields and main markets of Islamabad and various other
districts of Pakistan were determined and legal limits for such
insecticides were suggested.

L3 ANSWER 52 OF 105 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1995:536265 CAPLUS Full-text
DOCUMENT NUMBER: 122:284584
ORIGINAL REFERENCE NO.: 122:51739a,51742a
TITLE: Efficacy of different insecticides in
controlling Thrips tabaci Lind. on garlic
AUTHOR(S): Baloch, H. B.; Rustamani, M. A.; Hussain, T.;
Khan, M.
M.; Talpur, M. A.; Alizai, N. A.
CORPORATE SOURCE: Faculty Crop Protection, Sindh Agriculture
University,
Tandojam, Pak.
SOURCE: Proceedings of Pakistan Congress of Zoology (1993), 13, 529-33
CODEN: PKCZEK; ISSN: 1013-3461
PUBLISHER: Zoological Society of Pakistan
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Field evaluation of different insecticides for population
suppression of Thrips tabaci Lind. on the garlic was carried out.
The recommended doses of Anthio, Azodrin, Karate and Nogas were
sprayed thrice at fortnight intervals and first application was
made 30 days after germination. The results on reduction
percentages in the population of Thrips tabaci showed that Karate
and Anthio were comparatively more effective and persistent
insecticides against this insect pest on garlic. However, all the
insecticides had higher initial killing effect. The results
manifest the recommendations of Karate and Anthio to control
thrips when endemic to garlic crop.

L3 ANSWER 53 OF 105 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1995:499204 CAPLUS Full-text
DOCUMENT NUMBER: 122:233320
ORIGINAL REFERENCE NO.: 122:42483a,42486a
TITLE: Toxicity and repellency of some biorational
insecticides to Bemisia argentifolii on tomato

plants
 AUTHOR(S): Liu, Tong-Xian; Stansly, Philip A.
 CORPORATE SOURCE: Southwest Florida Research & Education Center,
 University of Florida, Immokalee, FL, 33934,
 USA
 SOURCE: Entomologia Experimentalis et Applicata (1995
), 74(2), 137-43
 CODEN: ETEAAT; ISSN: 0013-8703
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 AB A mineral oil, an insecticidal soap, and a plant-derived
 surfactant were compared with a broad-spectrum pyrethroid for
 residual toxicity and repellency to silverleaf whitefly, *Bemisia*
argentifolii Bellows & Perring (Homoptera: Aleyrodidae) on
 tomatoes (*Lycopersicum esculentum* Miller, cv. Lanai) under
 greenhouse and laboratory conditions. The materials tested were:
 Sunspray oil (a mineral oil), M-Pede (an insecticidal soap),
Nicotiana glauca extract (a sucrose ester surfactant), Garlic
 Barrier (repellency only), and the pyrethroid bifenthrin (Brigade
 10WP), with water as a control. For toxicity studies, whiteflies
 were confined on leaves which had been dipped in solns. of 0.5 +,
 1 + and 2 + field rate concns. Insecticide residues were compared
 when the leaves were wet and dry. Adult mortalities were greatest
 with bifenthrin and Sunspray oil, followed by M-Pede, *N. glauca*
 extract and water. Mortality from dry residue of lower rates of
 bifenthrin and Sunspray oil was greater than mortality from wet
 residues, whereas M-Pede lost all activity upon drying. Dual and
 multiple choice tests for repellency were carried out in the
 greenhouse or laboratory by spraying plants or individual leaves
 to runoff with 1 + field concns. Bifenthrin and Sunspray oil
 repelled *B. argentifolii* adults for up to 7 and 5 days, resp.,
 followed by M-Pede and extract of *N. glauca*, whereas Garlic
 Barrier was not significantly different from the water control in
 all tests. Nos. of whitefly eggs were significantly reduced on
 bifenthrin and Sunspray oil-treated leaves, whereas egg nos. in
 other treatments were not different from water. Sunspray oil as a
 dip proved to be at least as effective as the synthetic pyrethroid
 for whitefly control. A multiple-choice leaf-wheel proved to be a
 useful device to quickly evaluate repellent effects of several
 different insecticides to whitefly.

L3 ANSWER 54 OF 105 CAPLUS COPYRIGHT 2008 ACS on STN
 ACCESSION NUMBER: 1995:277621 CAPLUS Full-text
 DOCUMENT NUMBER: 122:104282
 ORIGINAL REFERENCE NO.: 122:19627a,19630a
 TITLE: Pesticides in fruits and vegetables: annual
 data for
 Modena province
 AUTHOR(S): Barbieri, Carla; Beneventi, Giampaolo; Del
 Carlo,
 Giuseppe; Forti, Stefano; Romano, Virginia;
 Zavatti,
 Adriano
 CORPORATE SOURCE: P.M.P., U.S.L., Modena, 41100, Italy
 SOURCE: Bollettino dei Chimici Igienisti, Parte
 Scientifica (

1993), 44(S6), 419-35
CODEN: BCISEN
DOCUMENT TYPE: Journal
LANGUAGE: Italian
AB Data are summarized from an official monitoring program covering about 120 pesticides (organophosphates and organochlorides) in 277 foods of plant origin in 1992. The most frequently encountered pesticides were azinphos-Me, pirimicarb, dicofol, endosulfan, parathion-Et, dimethoate, dithiocarbamates, procymidone, carbendazim, thiabendazole, vinclozolin, diclofluanide, and diphenylamine. Pesticides that exceeded legal tolerances included thiabendazole, diphenylamine, dithiocarbamates, quinalphos, copper, dimethoate, fenarimol, procymidone, ethoxyquin, and phorate.

L3 ANSWER 55 OF 105 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1994:25493 CAPLUS Full-text
DOCUMENT NUMBER: 120:25493
ORIGINAL REFERENCE NO.: 120:4701a
TITLE: Possibilities of using plant products to control harmful insects and plant pathogens
AUTHOR(S): Lakota, Stanislaw; Kwiatkowski, Marian; Czerwinski, Ebigniew
CORPORATE SOURCE: Oddz. Pszczyn., Inst. Przem. Org., Pszczyn, 43-200, Pol.
SOURCE: Pestycydy (Warsaw) (1993), (1), 29-33
CODEN: PSTYDL; ISSN: 0208-8703
DOCUMENT TYPE: Journal; General Review
LANGUAGE: Polish
AB A review with 3 refs. of the insecticidal and microbicidal properties of products from white mustard, horse radish, Thermopsis lanceolata, St. John's wort, sweet flag rhizomes, garlic, onion, etc.

=> s garlic extract and insecticide
10689 GARLIC
82 GARLICS
10714 GARLIC
(GARLIC OR GARLICS)
52252 EXTRACT
53647 EXTRACTS
101219 EXTRACT
(EXTRACT OR EXTRACTS)
364883 EXT
247678 EXTS
545496 EXT
(EXT OR EXTS)
580294 EXTRACT
(EXTRACT OR EXT)
893 GARLIC EXTRACT

(GARLIC(W)EXTRACT)
80024 INSECTICIDE
94959 INSECTICIDES
116648 INSECTICIDE
(INSECTICIDE OR INSECTICIDES)
L4 13 GARLIC EXTRACT AND INSECTICIDE

=> d ibib abs l4 all

L4 ANSWER 1 OF 13 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2008:961895 CAPLUS Full-text
DOCUMENT NUMBER: 149:301277
TITLE: Efficacy of *Bacillus thuringiensis*, mineral oil,
insecticidal emulsion and insecticidal gel
against *Phyllocnistis citrella* Stainton (Lepidoptera: Gracillariidae)
AUTHOR(S): Amiri-Besheli, Behnam
CORPORATE SOURCE: College of Agriculture Sciences, University of Mazandaran, Sari, Iran
SOURCE: Plant Protection Science (2008), 44(2), 68-73
CODEN: PPSLBM; ISSN: 1212-2580
URL:
<http://journals.uzpi.cz:8050/uniqueFiles/01742.pd>
PUBLISHER: f
Czech Academy of Agricultural Sciences,
Institute of
Agricultural and Food Information
DOCUMENT TYPE: Journal; (online computer file)
LANGUAGE: English

AB The efficacy of *Bacillus thuringiensis*, mineral oil, insecticidal emulsion (garlic extract, plant detergent soap and food additive) and insecticidal gel (plant oil and plant exts.) to control the citrus leafminer, *Phyllocnistis citrella*, was examined in laboratory conditions 24, 48, 72 and 96 h after treatments. Leaves of citrus with second and third instars of leafminer larvae were used in all exptl. tests. There were significant differences in larvae mortality between control and treatments ($P < 0.0001$), but no significant differences were found among treatments. Larvae mortality (%) in IE, IG, BT and MO was 67.83 ± 9.10 , 62.45 ± 8.10 , 49.08 ± 6.70 and 37.70 ± 8.50 , resp. The levels of mortality of larvae 96 and 72 h after treatments were higher than after 48 and 24 h. The results indicate that 3 days is the maximum period of efficacy for all tested insecticides. In conclusion, the present study showed that under heavy infestation, use of synthetic insecticides is necessary to prevent reinfestation by the citrus leafminer.

AN 2008:961895 CAPLUS Full-text
DN 149:301277
ED Entered STN: 11 Aug 2008
TI Efficacy of *Bacillus thuringiensis*, mineral oil, insecticidal emulsion and
insecticidal gel against *Phyllocnistis citrella* Stainton (Lepidoptera: Gracillariidae)
AU Amiri-Besheli, Behnam

CS College of Agriculture Sciences, University of Mazandaran, Sari,
Iran

SO Plant Protection Science (2008), 44(2), 68-73
CODEN: PPSLBM; ISSN: 1212-2580
URL: <http://journals.uzpi.cz:8050/uniqueFiles/01742.pdf>

PB Czech Academy of Agricultural Sciences, Institute of Agricultural
and Food
Information

DT Journal; (online computer file)

LA English

CC 5-4 (Agrochemical Bioregulators)

AB The efficacy of *Bacillus thuringiensis*, mineral oil, insecticidal
emulsion (garlic extract, plant detergent soap and food additive)
and insecticidal gel (plant oil and plant exts.) to control the
citrus leafminer, *Phyllocnistis citrella*, was examined in
laboratory conditions 24, 48, 72 and 96 h after treatments.
Leaves of citrus with second and third instars of leafminer larvae
were used in all exptl. tests. There were significant differences
in larvae mortality between control and treatments ($P < 0.0001$),
but no significant differences were found among treatments. Larvae
mortality (%) in IE, IG, BT and MO was 67.83 ± 9.10 , 62.45 ± 8.10 ,
 49.08 ± 6.70 and 37.70 ± 8.50 , resp. The levels of mortality of
larvae 96 and 72 h after treatments were higher than after 48 and
24 h. The results indicate that 3 days is the maximum period of
efficacy for all tested insecticides. In conclusion, the present
study showed that under heavy infestation, use of synthetic
insecticides is necessary to prevent reinfestation by the citrus
leafminer.

ST bioinsecticide *Bacillus* mineral oil emulsion *Phyllocnistis*

IT Insecticides
(biol., Palizin, Sirinol; efficacy of *Bacillus thuringiensis*,
mineral
oil, insecticidal emulsion and insecticidal gel against
Phyllocnistis
citrella)

IT *Bacillus thuringiensis morrisoni*
Detergents
Insecticides
Phyllocnistis citrella
(efficacy of *Bacillus thuringiensis*, mineral oil, insecticidal
emulsion
and insecticidal gel against *Phyllocnistis citrella*)

IT Paraffin oils
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(efficacy of *Bacillus thuringiensis*, mineral oil, insecticidal
emulsion
and insecticidal gel against *Phyllocnistis citrella*)

IT Fats and Glyceridic oils, biological studies
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(vegetable; efficacy of *Bacillus thuringiensis*, mineral oil,
insecticidal emulsion and insecticidal gel against
Phyllocnistis
citrella)

RE.CNT 18 THERE ARE 18 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

(1) Abbott, W; Journal of Economic Entomology 1925, V18, P265 CAPLUS

(2) Amiri Besheli, B; International Journal of Agricultural & Biology

2007, V9,
P893
(3) Amiri Besheli, B; Journal of Agricultural Science and Natural
Resources
(Agricultural Sciences) 2006, V4, P53
(4) Amiri Besheli, B; Pakistan Journal of Biological Science 2006, V9,
P2483
(5) Belasque, J; Plant Disease 2005, V89, P590
(6) Carlini, C; Toxicon 2002, V40, P1515 CAPLUS
(7) Dias, C; Journal of Economic Entomology 2005, V98, P1880
(8) Grafton, C; Journal of Economic Entomology 2003, V96, P1388
(9) Jafari, M; Report of the Workshop on Citrus Leafminer
(Phyllocnistis
citrella) and its Control in the Near East 1996
(10) Khyami, H; International Journal of Pest Management 2002, V48,
P297
(11) Lacey, I; Biological Control 2001, V21, P230
(12) Liu, Z; Journal of the Australian Entomological Society 1999, V38,
P141
(13) Mafi, S; Applied Entomology and Zoology 2006, V41, P33 CAPLUS
(14) Maha, A; Journal of Applied Toxicology 1999, V18, P301
(15) Michaud, J; Journal of Insect Science 2003, V3, P1
(16) Raga, A; Arquivos Do Instituto Biologico (Sao Paulo) 2001, V68,
P77
(17) Shapiro, J; The Florida Entomologist 1998, V81, P201 CAPLUS
(18) Sponagel, K; El minador de la hoja de los citricos Phyllocnistis
citrella
Un insecto plaga de importancia economica en la citricultura de
Honduras
1994, P1

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L4 IS NOT A RECOGNIZED COMMAND

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L5 ANSWER 1 OF 5 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2007:88128 CAPLUS Full-text

DOCUMENT NUMBER: 146:168847

TITLE: Foamable composition combining a polar solvent
and a

hydrophobic carrier

INVENTOR(S): Tamarkin, Dov; Friedman, Doron; Eini, Meir;
Besonov,

Alex

PATENT ASSIGNEE(S): Foamix Ltd., Israel

SOURCE: U.S. Pat. Appl. Publ., 20pp., Cont.-in-part of

U.S.

Ser. No. 532,618.

CODEN: USXXCO

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

31

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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US 20070020213	A1	20070125	US 2006-488989	
20060719 <--				
WO 2004037225	A2	20040506	WO 2003-IB5527	
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LK, LR,				
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SK, TR,				
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TD, TG				
US 20050031547	A1	20050210	US 2004-835505	
20040428				
US 20050069566	A1	20050331	US 2004-911367	
20040804				
US 20050074414	A1	20050407	US 2004-922358	
20040820				
AU 2004313285	A1	20050929	AU 2004-313285	
20041216				
ZA 2005003298	A	20060830	ZA 2005-3298	
20050425 <--				
US 20050271596	A1	20051208	US 2005-124676	
20050509 <--				
US 20060140984	A1	20060629	US 2005-532618	
20051222 <--				
AU 2006201878	A1	20070927	AU 2006-201878	
20060504 <--				
WO 2007085902	A2	20070802	WO 2006-IB4119	
20060719				
WO 2007085902	A3	20071129		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ,				
CA, CH,				
CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,				

GB, GD,
 KN, KP,
 MK, MN,
 RS, RU,
 UA, UG,
 RW: US, UZ, VC, VN, ZA, ZM, ZW
 HU, IE, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR,
 BF, BJ, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR,
 BW, GH, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG,
 AZ, BY, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM,
 KG, KZ, MD, RU, TJ, TM, AP, EA, EP, OA
 US 20070280891 A1 20071206 US 2006-645444
 20061226
 US 20070292359 A1 20071220 US 2007-811140
 20070607 <--
 WO 2008038140 A2 20080403 WO 2007-IB3463
 20070607
 WO 2008038140 A3 20080904
 W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY,
 BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG,
 ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP,
 KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA,
 MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG,
 PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ,
 TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW
 RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR,
 HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK,
 TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD,
 TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW,
 AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AP, EA, EP, OA
 US 20080050317 A1 20080228 US 2007-894668
 20070820
 US 20080152596 A1 20080626 US 2007-894767
 20070820
 PRIORITY APPLN. INFO.: IL 2002-152486 A
 20021025 <-- US 2002-429546P P
 20021129 <-- US 2003-492385P P

20030804	US 2003-497648P	P
20030825	WO 2003-IB5527	W
20031024	US 2003-530015P	P
20031216	US 2004-835505	A2
20040428	US 2004-911367	A2
20040804	US 2004-922358	A2
20040820	US 2005-124676	A2
20050509	US 2005-700702P	P
20050719	US 2005-532618	A2
20051222	US 2005-78902	A2
20050311	US 2005-696878P	P
20050706	US 2006-781868P	P
20060313	US 2006-811627P	P
20060607	US 2006-481596	A2
20060706	US 2006-482596	A
20060707	US 2006-488989	A2
20060719	US 2007-897638P	P
20070126	US 2007-899176P	P
20070202	US 2007-717897	A2
20070313	US 2007-811140	A1
20070607		

AB The present invention relates to a foamable vehicle or cosmetic or pharmaceutical composition, comprising: an organic carrier, at 10-0% by weight, wherein the organic carrier concurrently comprises: (i) at least one hydrophobic organic carrier, and (ii) at least one polar solvent; (2) at least one surfactant; (3) water; and (4) at least one liquefied or compressed gas propellant at 3-25% by weight of the total composition. The present invention further provides a method of treating, alleviating or preventing a disorder of mammalian subject, comprising administering the above-mentioned compns. to an afflicted target site.

=> S GARLIC EXTRACT
10689 GARLIC

82 GARLICS
 10714 GARLIC
 (GARLIC OR GARLICS)
 52252 EXTRACT
 53647 EXTRACTS
 101219 EXTRACT
 (EXTRACT OR EXTRACTS)
 364883 EXT
 247678 EXT
 545496 EXT
 (EXT OR EXT)
 580294 EXTRACT
 (EXTRACT OR EXT)
 L6 893 GARLIC EXTRACT
 (GARLIC(W)EXTRACT)

=> S L6 AND PESTICIDE
 69751 PESTICIDE
 73113 PESTICIDES
 95570 PESTICIDE
 (PESTICIDE OR PESTICIDES)

L7 8 L6 AND PESTICIDE

=> S L7 AND (PY<2003 OR AY<2003 OR PRY<2003)
 22961976 PY<2003
 4500961 AY<2003
 3969407 PRY<2003

L8 5 L7 AND (PY<2003 OR AY<2003 OR PRY<2003)

=> D IBIB ABS L8 5

L8 ANSWER 5 OF 5 CAPLUS COPYRIGHT 2008 ACS on STN
 ACCESSION NUMBER: 1992:168344 CAPLUS Full-text
 DOCUMENT NUMBER: 116:168344
 ORIGINAL REFERENCE NO.: 116:28327a,28330a
 TITLE: allicin-containing pesticide for golf course
 greens
 INVENTOR(S): Sakai, Isao
 PATENT ASSIGNEE(S): Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 3 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	----	-----	-----	----
JP 04005211	A	19920109	JP 1990-101808	
19900419 <--				
PRIORITY APPLN. INFO.:			JP 1990-101808	
19900419 <--				

AB The composition comprises garlic extract, containing allicin and
 proteins(no data) as major components, mixed with phytic acid,
 silicic acid, and water. This composition is nonpolluting. Thus,
 40 g phytic acid and 10 g silicic acid sol were dissolved in 40 kg

water, and into this were immersed 20 kg garlic roots for 6 days.
The product was used as pesticide.

=> D IBIB ABS L8 4

L8 ANSWER 4 OF 5 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1995:634743 CAPLUS Full-text
DOCUMENT NUMBER: 123:32197
ORIGINAL REFERENCE NO.: 123:5957a,5960a
TITLE: Fertilizers which protect plants against heavy
metals,
isotopes and pesticides.
INVENTOR(S): Korosi, Ferenc; Jezierska-Szabo, Elzbieta;
Illes,
Bela; Toth, Zoltan
PATENT ASSIGNEE(S): Ponton Kft., Hung.
SOURCE: PCT Int. Appl., 35 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	----	-----	-----	----
WO 9511205	A1	19950427	WO 1994-HU45	
19941021 <--				
W: AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, ES, FI,				
GB, JP,				
KP, KR, KZ, LK, LU, LV, MG, MN, MW, NL, NO, NZ, PL, PT,				
RO, RU,				
SD, SE, SK, UA, US, UZ, VN				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL,				
PT, SE,				
BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
AU 9510746	A	19950508	AU 1995-10746	
19941021 <--				
PRIORITY APPLN. INFO.:			HU 1993-2976	A
19931021 <--				
			WO 1994-HU45	W
19941021 <--				

AB The invention covers prepns. serving as nutrient source for plants, while increasing plant tolerance to heavy metal and isotope absorption, as well as for reducing the pesticide volume needed for protection of the plants. The prepns. contain soluble salts and/or complexes of physiol.-important macro and/or micro elements and/or the minerals containing such materials, as well as plant exts. containing biocide and/or repellent ingredients.

=> D IBIB ABS L8 3

L8 ANSWER 3 OF 5 CAPLUS COPYRIGHT 2008 ACS on STN
 ACCESSION NUMBER: 1998:364918 CAPLUS Full-text
 DOCUMENT NUMBER: 129:13494
 ORIGINAL REFERENCE NO.: 129:2831a,2834a
 TITLE: Pesticidal fumigant for hothouses
 INVENTOR(S): Ohtsuka, Riichiro
 PATENT ASSIGNEE(S): Abion Corporation Co. Ltd., Japan
 SOURCE: Eur. Pat. Appl., 10 pp.
 CODEN: EPXXDW
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO. -----	KIND ----	DATE -----	APPLICATION NO. -----	DATE -----
EP 843965 19971120 <--	A1	19980527	EP 1997-309340	
EP 843965 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO	B1	20021218		
JP 10152403 19961122 <--	A	19980609	JP 1996-311809	
JP 3108027	B2	20001113		
CA 2220211 19971105 <--	A1	19980522	CA 1997-2220211	
CA 2220211	C	20030415		
ES 2188875 19971120 <--	T3	20030701	ES 1997-309340	
CN 1191675 19971121 <--	A	19980902	CN 1997-122933	
CN 1124787	C	20031022		
PRIORITY APPLN. INFO.: 19961122 <--			JP 1996-311809	A

AB The title fumigant comprises cinnamic aldehyde, hinokitiol,
 allylmustard oil and/or garlic extract The fumigant is delivered
 using and air boiler or elec. heating plate.

REFERENCE COUNT: 15 THERE ARE 15 CITED REFERENCES AVAILABLE
 FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE

RE FORMAT

=> D IBIB ABS L8 2

L8 ANSWER 2 OF 5 CAPLUS COPYRIGHT 2008 ACS on STN
 ACCESSION NUMBER: 2003:71735 CAPLUS Full-text
 DOCUMENT NUMBER: 138:102386
 TITLE: Pesticidal garlic composition for foliar
 applications
 INVENTOR(S): Arand, Anthony; Arand, John K.
 PATENT ASSIGNEE(S): USA
 SOURCE: U.S., 21 pp.
 CODEN: USXXAM

DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	----	-----	-----	----

US 6511674	B1	20030128	US 1998-99480	
19980617 <--				
PRIORITY APPLN. INFO.:			US 1998-99480	
19980617 <--				

AB An agricultural composition comprises a first component comprising a garlic extract solution having a quantifiable concentration of greater than ten percent by weight of a garlic extract, the garlic extract comprising allitin, allicin, diallyl disulfide, and DMSO; and a second component comprising an agricultural treatment agent of one of a pesticide, miticide, fungicide, antibiotic, herbicide, defoliant, nutrient, adjuvant, and water.

REFERENCE COUNT: 27 THERE ARE 27 CITED REFERENCES AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE
RE FORMAT

=> S GARLIC EXTRACT AND INSECTS

10689 GARLIC
82 GARLICS
10714 GARLIC
(GARLIC OR GARLICS)
52252 EXTRACT
53647 EXTRACTS
101219 EXTRACT
(EXTRACT OR EXTRACTS)
364883 EXT
247678 EXTS
545496 EXT
(EXT OR EXTS)
580294 EXTRACT
(EXTRACT OR EXT)
893 GARLIC EXTRACT
(GARLIC(W)EXTRACT)
37008 INSECTS

L9 8 GARLIC EXTRACT AND INSECTS

=> S L9 AND (PY<2003 OR AY< 2003 OR PRY<2003)

22961976 PY<2003
4500961 AY< 2003
3969407 PRY<2003

L10 6 L9 AND (PY<2003 OR AY< 2003 OR PRY<2003)

=> D IBIB ABS L10 6

L10 ANSWER 6 OF 6 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1982:436423 CAPLUS Full-text
DOCUMENT NUMBER: 97:36423
ORIGINAL REFERENCE NO.: 97:6203a,6206a

TITLE: Cholesterol metabolism in Lohita grandis Gray
(Hemiptera: Pyrrhocoridae: Insecta). Effect of
corpora
allatectomy and garlic extract
AUTHOR(S): Mandal, Sanjay; Choudhuri, D. K.
CORPORATE SOURCE: Zool. Dep., Univ. Burdwan, Burdwan, 713 104,
India
SOURCE: Current Science (1982), 51(7), 367-9
CODEN: CUSCAM; ISSN: 0011-3891
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The cholesterol (I) levels in the testis and fat body of male L.
grandis were higher than in the female ovary and fat body, whereas
the I level in the hemolymph of female insects was higher than in
that of male insects. Allatectomy in both sexes led to an extra
accumulation of I, whereas the opposite was true in garlic ext .-
injected insects. The effect of allatectomy was directly
attributed to the absence of juvenile hormone (JH) in the body;
the close functional relation between JH and the prothoracic gland
might result in low ecdysone synthesis, which was reflected in I
accumulation in allatectomized insects. The garlic extract has
some antimicrobial action and the decrease in I levels may be a
result of a reduced microbial population. Since the garlic
extract mimics the effects of JH and ecdysone, the decrease in I
may be a result of a disturbance in the JH and ecdysone balance.

> d ibib abs l10 1

L10 ANSWER 1 OF 6 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2004:612069 CAPLUS Full-text

DOCUMENT NUMBER: 141:118646

TITLE: Mothproofing and repellent agents for plants
containing components of red pepper, garlic,
molasses,
etc.

INVENTOR(S): Yamanoue, Toshio

PATENT ASSIGNEE(S): Eco Factory K. K., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 9 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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JP 2004210651	A	20040729	JP 2002-379198	
20021227 <--				
PRIORITY APPLN. INFO.:			JP 2002-379198	
20021227 <--				

AB The agents, useful for controlling insects of crop plants without
using agrochems., are manufactured by extracting useful components
of ≥ 2 selected from red pepper, garlic, molasses, shochu. bamboo
vinegar, grapefruit seeds, and Wasabia japonica (Japanese

horseradish) and mixing them. The agents are especially applied to vegetables and fruits just before harvesting.

=> d ibib abs 110 2

L10 ANSWER 2 OF 6 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2003:950466 CAPLUS Full-text

DOCUMENT NUMBER: 139:392531

TITLE: Insect repellent composition containing hot pepper and

garlic extracts, and neem oil

INVENTOR(S): White, James F.

PATENT ASSIGNEE(S): Holy Terra Products, Inc., USA

SOURCE: U.S. Pat. Appl. Publ., 3 pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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US 20030224029	A1	20031204	US 2002-159624	
20020531 <--				
PRIORITY APPLN. INFO.:			US 2002-159624	
20020531 <--				

AB The composition for repelling insects is formulated as an aqueous solution to be sprayed on a surface from which insects are to be repelled. In preferred embodiments, the composition is a non-toxic and biodegradable insect repellent comprising an aqueous carrier, at least about 0.05 percent by volume of hot pepper extract, at least about 0.05 percent by volume of garlic extract, and at least about 0.05 percent by volume of Neem seed oil.

<http://www.cas.org/legal/infopolicy.html>

=> s garlic

10689 GARLIC

82 GARLICS

L15 10714 GARLIC

(GARLIC OR GARLICS)

=> s garlic extracts

10689 GARLIC

82 GARLICS

10714 GARLIC

(GARLIC OR GARLICS)

53647 EXTRACTS

247678 EXTs

247678 EXTs

269501 EXTRACTS

(EXTRACTS OR EXTS)
L16 211 GARLIC EXTRACTS
(GARLIC(W)EXTRACTS)

=> s l16 and sulfides
90711 SULFIDES
1 SULFIDSESES
90712 SULFIDES
(SULFIDES OR SULFIDSESES)
1356 SULPHIDES
1356 SULPHIDES
(SULPHIDES)
91815 SULFIDES
(SULFIDES OR SULPHIDES)

L17 6 L16 AND SULFIDES

=> s l17 and (py<2003 or ay<2003 or pry<2003)
22961976 PY<2003
4500961 AY<2003
3969407 PRY<2003

L18 6 L17 AND (PY<2003 OR AY<2003 OR PRY<2003)

=> d ibib abs l18 6

L18 ANSWER 6 OF 6 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1993:240969 CAPLUS Full-text
DOCUMENT NUMBER: 118:240969
ORIGINAL REFERENCE NO.: 118:41613a,41616a
TITLE: Masking of unpleasant odor of alkyl sulfide
drugs
INVENTOR(S): Kominato, Jo; Azuma, Yukio
PATENT ASSIGNEE(S): Riken Chemical Ind, Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 3 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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JP 05043454	A	19930223	JP 1990-418405	
19901225 <--				
JP 3213741	B2	20011002		
PRIORITY APPLN. INFO.:			JP 1990-418405	
19901225 <--				

OTHER SOURCE(S): MARPAT 118:240969

AB Alkyl sulfide drugs on garlic preps. (containing alkyl sulfide)
are mixed with lemon oil to mask their unpleasant odor. Thus, di-
Me trisulfide 70 and lemon oil 30 parts were mixed to give a
preparation without unpleasant odor. Other substances such as
cineole also show masking effect.

=> d ibib abs 118 5

L18 ANSWER 5 OF 6 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1993:440296 CAPLUS Full-text
DOCUMENT NUMBER: 119:40296
ORIGINAL REFERENCE NO.: 119:7127a,7130a
TITLE: A preliminary study on the action of genus
Allium on thyroid iodine-131 uptake in rats
AUTHOR(S): Artacho, M. R.; Ruiz, M. D.; Olea, F.; Olea,
N.
CORPORATE SOURCE: Fac. Farm., Univ. Granada, Granada, 18071,
Spain
SOURCE: Revista Espanola de Fisiologia (1992),
48(1), 59-60
CODEN: REFIAS; ISSN: 0034-9402
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Because of the growing search for therapeutic applications of
onion and garlic exts., the toxic effect associated with the use
of genus Allium was investigated in rats. The effect of several
sulfides, garlic, and onion extract on 131iodide uptake by the
thyroid was observed. The garlic extract and a number of sulfides
significantly inhibited iodine uptake.

=> s garlic extracts and compounds

10689 GARLIC
82 GARLICS
10714 GARLIC
(GARLIC OR GARLICS)
53647 EXTRACTS
247678 EXTs
247678 EXTs
269501 EXTRACTS
(EXTRACTS OR EXTs)
211 GARLIC EXTRACTS
(GARLIC(W)EXTRACTS)
933384 COMPOUNDS
2 COMPOUNDSSES
933386 COMPOUNDS
(COMPOUNDS OR COMPOUNDSSES)
1834783 COMPDS
1834783 COMPDS
2330122 COMPOUNDS
(COMPOUNDS OR COMPDS)

L19 51 GARLIC EXTRACTS AND COMPOUNDS

=> s 119 and (py<2002 or ay<2002 or pry<2002)

21971309 PY<2002
4218134 AY<2002
3685068 PRY<2002

L20 34 L19 AND (PY<2002 OR AY<2002 OR PRY<2002)

=> d ibib abs 120 34

L20 ANSWER 34 OF 34 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1976:149404 CAPLUS Full-text
DOCUMENT NUMBER: 84:149404
ORIGINAL REFERENCE NO.: 84:24285a,24288a
TITLE: Evaluation of flavoring preparations from
garlic
AUTHOR(S): Tokarska, Barbara; Karwowska, Krystyna;
Charazka,
Zofia
CORPORATE SOURCE: Zakl. Technol. Przetworow Owocowych
Warzywnych, Inst.
Przem. Ferment., Warsaw, Pol.
SOURCE: Prace Instytutow i Laboratoriow Badawczych
Przemyslu
Spozywczego (1975), 25(2), 229-34
CODEN: PILPAH; ISSN: 0554-9043
DOCUMENT TYPE: Journal
LANGUAGE: Polish
AB Flavoring garlic exts., containing .apprx.13% S compds., were
processed into an oily preparation or preparation adsorbed on a
solid carrier, easily soluble in H2O. The preps. had a high
concentration of flavoring substances, high organoleptic
properties, and a storage stability of 2 years.

=> d ibib abs 120 33

L20 ANSWER 33 OF 34 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1976:459614 CAPLUS Full-text
DOCUMENT NUMBER: 85:59614
ORIGINAL REFERENCE NO.: 85:9619a,9622a
TITLE: Studies on saponins in garlic (Allium sativum)
AUTHOR(S): Smockiewiczowa, Aleksandra; Nitschke, Danuta
CORPORATE SOURCE: Pol.
SOURCE: Zeszyty Naukowe - Akademia Ekonomiczna w
Poznaniu,
Seria 1: Prace z Zakresu Towaroznawstwa i
Chemii (
1975), 62, 43-8
CODEN: ZNASDH; ISSN: 0208-4902
DOCUMENT TYPE: Journal
LANGUAGE: Polish
AB Saponin-like compds. were extracted from garlic with hexane, Et
acetate, and BuOH. Fractions were examined by thin-layer and
column chromatog. The eluates were oily and exhibited hemolysis.

=> d ibib abs 120 32

L20 ANSWER 32 OF 34 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1983:185572 CAPLUS Full-text
DOCUMENT NUMBER: 98:185572

ORIGINAL REFERENCE NO.: 98:28121a,28124a
 TITLE: Preparation of odorless inclusion compounds
 containing medicinal garlic extract
 PATENT ASSIGNEE(S): Riken Chemical Industry Co., Ltd., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 2 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 58021620	A	19830208	JP 1981-120373	
JP 03066289	B	19911016		
PRIORITY APPLN. INFO.: 19810730 <--			JP 1981-120373	

AB Cyclodextrin inclusion compds. containing medicinal garlic exts. are prepared to control the odor of garlic. Thus, 2 L water containing 400 g β -cyclodextrin and 100 g garlic oil was stirred at pH 2 for 5 h, and coagulated materials were filtered and the filtrate was dried to obtain 480 g of an odorless compound

=> d ibib abs 120 31

L20 ANSWER 31 OF 34 CAPLUS COPYRIGHT 2008 ACS on STN
 ACCESSION NUMBER: 1989:36660 CAPLUS Full-text
 DOCUMENT NUMBER: 110:36660
 ORIGINAL REFERENCE NO.: 110:6061a,6064a
 TITLE: Studies on the anticandidal mode of action of Allium

sativum (garlic)
 AUTHOR(S): Ghannoum, Mahmoud A.
 CORPORATE SOURCE: Fac. Sci., Kuwait Univ., Safat, 13060, Kuwait
 SOURCE: Journal of General Microbiology (1988), 134(11), 2917-24
 CODEN: JGMIAN; ISSN: 0022-1287

DOCUMENT TYPE: Journal
 LANGUAGE: English

AB The mode of action of aqueous garlic extract (AGE) was studied in Candida albicans. The min. inhibitory concentration (MIC) of AGE against 6 clin. yeast isolates was 0.8-1.6 mg/mL. SEM and cell leakage studies showed that garlic treatment affected the structure and integrity of the outer surface of the yeast cells. Growth of C. albicans in the presence of AGE affected the yeast lipid in a number of ways: the total lipid content was decreased, garlic-grown yeasts had a higher level of phosphatidylserines and a lower level of phosphatidylcholines, in addition to free sterols and sterol esters, C. albicans accumulated esterified steryl glycosides, the concentration of palmitic acid (16:0) and oleic acid (18:1) increased and that of linoleic acid (18:2) and linolenic acid (18:3) decreased. O2 consumption of AGE-treated C.

albicans was also reduced. The anticandidal activity of AGE was antagonized by thiols such as L-cysteine, GSH, and HSCH₂CH₂OH. Interaction studies between AGE and thiols included growth antagonism, enzymic inhibition, and interference of 2 linear zones of inhibition. All 3 approaches suggest that AGE exerts its effect by the oxidation of -SH groups in essential proteins, causing inactivation of enzymes and subsequent microbial growth inhibition.

=> s garlic extracts and identification

10689 GARLIC
82 GARLICS
10714 GARLIC
(GARLIC OR GARLICS)
53647 EXTRACTS
247678 EXTs
247678 EXTs
269501 EXTRACTS
(EXTRACTS OR EXTs)
211 GARLIC EXTRACTS
(GARLIC(W)EXTRACTS)
388644 IDENTIFICATION
5091 IDENTIFICATIONS
391959 IDENTIFICATION
(IDENTIFICATION OR IDENTIFICATIONS)

L21 8 GARLIC EXTRACTS AND IDENTIFICATION

=> s l21 and (py<2002 or ay<2002 or pry<2002)

21971309 PY<2002
4218134 AY<2002
3685068 PRY<2002

L22 4 L21 AND (PY<2002 OR AY<2002 OR PRY<2002)

=> d ibib abs l22 4

L22 ANSWER 4 OF 4 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1977:594680 CAPLUS Full-text

DOCUMENT NUMBER: 87:194680

ORIGINAL REFERENCE NO.: 87:30739a,30742a

TITLE: Isolation, purification, identification, synthesis, and kinetics of activity of the anticandidal component of *Allium sativum*, and

a

hypothesis for its mode of action

AUTHOR(S): Barone, Frank E.; Tansey, Michael R.

CORPORATE SOURCE: Dep. Microbiol., Indiana Univ., Bloomington, IN, USA

SOURCE: Mycologia (1977), 69(4), 793-825
CODEN: MYCOAE; ISSN: 0027-5514

DOCUMENT TYPE: Journal

LANGUAGE: English

AB An aqueous extract of bulbs of garlic (*A. sativum*) had antifungal activity toward clin. isolates of *Candida albicans*. The chromatog. behavior of the anticandidal activity, its approx. mol.

weight (<700), its stability in acid, and its inactivation by heat or basic solns. were similar to the characteristics of synthetic allicin [539-86-6], the known antibacterial principle of garlic. The activities of both allicin and the garlic extract were inhibited by a sulfhydryl compound (L-cysteine) or a reducing compound (dithioerythritol). The kinetics of inhibition of *C. albicans* by the garlic extract are reported for different concns. of the preparation Allicin appears to be the primary, but possibly not the only, anticandidal component of garlic extract A proposed model for the activity of allicin is based on its disruption of cell metabolism by means of its effects on sulfhydryl groups.

=> s garlic extract and diallyl sulfide and diallyl disulfide and diallyl trisulfide and diallyl tetrasulfide

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10689 GARLIC
  82 GARLICS
10714 GARLIC
      (GARLIC OR GARLICS)
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53647 EXTRACTS
101219 EXTRACT
      (EXTRACT OR EXTRACTS)
364883 EXT
247678 EXTs
545496 EXT
      (EXT OR EXTs)
580294 EXTRACT
      (EXTRACT OR EXT)
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      (GARLIC(W)EXTRACT)
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      (DIALLYL OR DIALLYLS)
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  90711 SULFIDES
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      (SULPHIDE OR SULPHIDES)
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      (SULFIDE OR SULPHIDE)
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  14999 DISULFIDES
123819 DISULFIDE

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1198 DISULPHIDE
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1243 DISULPHIDE
        (DISULPHIDE OR DISULPHIDES)
124601 DISULFIDE
        (DISULFIDE OR DISULPHIDE)
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        (DIALLYL(W)DISULFIDE)
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        (DIALLYL OR DIALLYLS)
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        (DIALLYL OR DIALLYLS)
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    80 DIALLYL TETRASULFIDE
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L23      7 GARLIC EXTRACT AND DIALLYL SULFIDE AND DIALLYL DISULFIDE
AND
        DIALLYL TRISULFIDE AND DIALLYL TETRASULFIDE

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=> s 123 and (py<2002 or ay<2002 or pry<2002)

21971309 PY<2002

4218134 AY<2002

3685068 PRY<2002

L24 3 L23 AND (PY<2002 OR AY<2002 OR PRY<2002)

=> d ibib abs 124 3

L24 ANSWER 3 OF 3 CAPLUS COPYRIGHT 2008 ACS on STN
 ACCESSION NUMBER: 1995:233868 CAPLUS Full-text
 DOCUMENT NUMBER: 122:71940
 ORIGINAL REFERENCE NO.: 122:13475a,13478a

TITLE: Antioxidant and radical scavenging effects of aged garlic extract and its constituents
 AUTHOR(S): Imai, J.; Ide, N.; Nagae, S.; Moriguchi, T.; Matsuura, H.; Itakura, Y.
 CORPORATE SOURCE: Inst. OTC Res., Wakunaga Pharmaceutical Co. Ltd., Hiroshima, 729-64, Japan
 SOURCE: Planta Medica (1994), 60(5), 417-20
 CODEN: PLMEAA; ISSN: 0032-0943
 PUBLISHER: Thieme
 DOCUMENT TYPE: Journal
 LANGUAGE: English

AB The antioxidant properties of three garlic prepsns. and organosulfur compds. in garlic have been determined Aged garlic extract inhibited the emission of low level chemiluminescence and the early formation of thiobarbituric acid-reactive substances (TBA-RS) in liver microsomal fraction initiated by t-Bu hydroperoxide. However, the water exts. of raw and heat-treated garlic enhanced the emission of low level chemiluminescence. Among the variety of organosulfur compds., S-allylcysteine (SAC) and S-allylmercaptocysteine (SAMC), the major organosulfur compds. found in aged garlic extract, showed radical scavenging activity in both chemiluminescence and 1,1-diphenyl-2-picrylhydrazyl (DPPH) assays, indicating that these compds. may play an important role in the antioxidant activity of aged garlic extract

<http://www.cas.org/legal/infopolicy.html>

This file contains CAS Registry Numbers for easy and accurate substance identification.

```
=> e gaudout david?/au
E1      1      GAUDOU EMILE/AU
E2      3      GAUDOUT DAVID/AU
E3      0  --> GAUDOUT DAVID?/AU
E4      2      GAUDOUX F/AU
E5      5      GAUDOUX FLORENCE/AU
E6      2      GAUDOUZ CLAUDE/AU
E7      3      GAUDOUZ MARCEL/AU
E8      1      GAUDOUZ MARCEL M/AU
E9      3      GAUDOUZ ROLAND/AU
E10     1      GAUDRAND ODILE/AU
E11     1      GAUDRAT F/AU
E12     1      GAUDRAY FLORENCE/AU
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```
=> s e2
L1      3 "GAUDOUT DAVID"/AU
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=> s l1
L2      3 "GAUDOUT DAVID"/AU
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=> d l2 ibib abs ti hit 1-3
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L2 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 2005:492122 CAPLUS Full-text
 DOCUMENT NUMBER: 143:2646

TITLE: Diallyl polysulfides from garlic as
 insecticides and acaricides
 INVENTOR(S): Gaudout, David; Inisan, Claude; Durechou,
 Serge; Megard, Denis
 PATENT ASSIGNEE(S): Diana Vegetal, Fr.
 SOURCE: Fr. Demande, 20 pp.
 CODEN: FRXXBL
 DOCUMENT TYPE: Patent
 LANGUAGE: French
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
FR 2863144	A1	20050610	FR 2003-14394	
20031209				
FR 2863144	B1	20060804		
CA 2548601	A1	20050623	CA 2004-2548601	
20041209				
WO 2005055713	A2	20050623	WO 2004-FR3173	
20041209				
WO 2005055713	A3	20051222		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ,				
CA, CH,				
CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,				
GB, GD,				
GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR,				
KZ, LC,				
LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ,				
NA, NI,				
NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK,				
SL, SY,				
TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA,				
ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM,				
ZW, AM,				
AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ,				
DE, DK,				
EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL,				
PL, PT,				
RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ,				
GW, ML,				
MR, NE, SN, TD, TG				
EP 1691616	A2	20060823	EP 2004-805676	
20041209				
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE,				
MC, PT,				
IE, SI, LT, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK, IS				
BR 2004017404	A	20070508	BR 2004-17404	
20041209				
US 20080214678	A1	20080904	US 2008-582043	
20080317				
PRIORITY APPLN. INFO.:			FR 2003-14394	A
20031209				
			WO 2004-FR3173	W

20041209

AB Compns. containing diallyl sulfide, diallyl disulfide, diallyl trisulfide and diallyl tetrasulfide, as well γ -glutamyl-S-allylcysteine, allicin and alliin, extracted from garlic, are insecticide and acaricide.

TI Diallyl polysulfides from garlic as insecticides and acaricides
REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE

RE FORMAT

IN Gaudout, David; Inisan, Claude; Durechou, Serge; Megard, Denis

L2 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2003:675515 CAPLUS Full-text

DOCUMENT NUMBER: 139:185351

TITLE: Use of a dihydrochalcone-rich phenolic fraction in a

cosmetic composition for preventing weight

gain

INVENTOR(S): Gaudout, David; Megard, Denis; Lejard, Frederic

PATENT ASSIGNEE(S): Diana Ingredients, Fr.

SOURCE: Eur. Pat. Appl., 8 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: French

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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EP 1338270	A2	20030827	EP 2002-290833	
20020404				
EP 1338270	A3	20051005		
EP 1338270	B1	20090121		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,				
IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
FR 2836336	A1	20030829	FR 2002-2418	
20020226				
FR 2836336	B1	20040827		
US 20030161900	A1	20030828	US 2002-118521	
20020404				
US 6805873	B2	20041019		
AT 421313	T	20090215	AT 2002-290833	
20020404				
JP 2003252783	A	20030910	JP 2002-227397	
20020805				
US 20050048149	A1	20050303	US 2004-967524	
20041018				
US 7285298	B2	20071023		
PRIORITY APPLN. INFO.:			FR 2002-2418	A
20020226				
			US 2002-118521	A3
20020404				

AB Dihydrochalcone-rich phenolic fraction is used in cosmetic compns.
for preventing weight gain and treatment of certain forms of non-
pathol. obesity. Efficacy of phloridzin-rich phenolic fraction in
inhibition of glucose transport is shown. A capsule contained 24
mg of the phenolic extract

TI Use of a dihydrochalcone-rich phenolic fraction in a cosmetic
composition
for preventing weight gain

REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE
FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE

RE FORMAT

IN Gaudout, David; Megard, Denis; Lejard, Frederic

L2 ANSWER 3 OF 3 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2002:733982 CAPLUS Full-text

DOCUMENT NUMBER: 137:252732

TITLE: Phloridzin-rich phenolic fraction and its use
as

cosmetic, food or nutritional agent

INVENTOR(S): Gaudout, David; Megard, Denis; Inisan,
Claude; Esteve, Christian; Lejard, Frederic

PATENT ASSIGNEE(S): Diana Ingredients, Fr.

SOURCE: Eur. Pat. Appl., 19 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: French

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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EP 1243586	A1	20020925	EP 2002-290690	
20020319				
EP 1243586	B1	20050914		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE,				
MC, PT,				
IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
FR 2822466	A1	20020927	FR 2001-3968	
20010323				
FR 2822466	B1	20040702		
AT 304538	T	20050915	AT 2002-290690	
20020319				
ES 2247279	T3	20060301	ES 2002-290690	
20020319				
US 20030003120	A1	20030102	US 2002-105040	
20020322				
US 7041322	B2	20060509		
US 20060073223	A1	20060406	US 2005-282396	
20051118				
US 7427418	B2	20080923		
PRIORITY APPLN. INFO.:			FR 2001-3968	A
20010323				
			US 2002-105040	A3
20020322				

AB Phloridzin-rich phenolic compds. are extracted from fruits of Rosaceae family and are used as cosmetic, food or nutritional agents. Hydroalcoholic extract of *Malus sylvestris* was prepared containing 492.1 mg/g polyphenols and 196.2 mg/g phloridzin. Antioxidant and antiradical activity of the phloridzin-rich polyphenols was studied.

TI Phloridzin-rich phenolic fraction and its use as cosmetic, food or nutritional agent

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE

RE FORMAT

IN Gaudout, David; Megard, Denis; Inisan, Claude; Esteve, Christian; Lejard, Frederic

<http://www.cas.org/support/stngen/stndoc/properties.html>

=> e dially disulfide/cn

E1	1	DIALLOY/CN
E2	1	DIALLOY 3004/CN
E3	0 -->	DIALLY DISULFIDE/CN
E4	1	DIALLYDIMETHYLAMMONIUM CHLORIDE-DIACETONE ACRYLAMIDE COPOLYM
		ER/CN
E5	1	DIALLYDIMETHYLAMMONIUM PHOSPHATE/CN
E6	1	DIALLYL/CN
E7	1	DIALLYL ((THIOPHEN-2-YL)METHYL)AMINE/CN
E8	1	DIALLYL (1-ACETOXYETHYL)PHOSPHONATE/CN
E9	1	DIALLYL (BUTYLAMIDOMETHYL)PHOSPHONATE/CN
E10	1	DIALLYL (BUTYRAMIDOMETHYL)PHOSPHONATE/CN
E11	1	DIALLYL (CHLOROMETHYL)PHOSPHONATE/CN
E12	1	DIALLYL (CYANOMETHYL)PHOSPHONATE/CN

=> e DAS2/cn

E1	1	DAS-PMTI 1/CN
E2	1	DAS-S/CN
E3	0 -->	DAS2/CN
E4	1	DASANIT/CN
E5	1	DASANIT O/CN
E6	1	DASANIT O ANALOG/CN
E7	1	DASANIT SULFONE/CN
E8	1	DASANIT SULPHONE/CN
E9	1	DASANIT-DISULFOTON MIXT./CN
E10	1	DASANIT-NEMACUR MIXT./CN
E11	1	DASANTAFIL/CN
E12	1	DASATINIB/CN

=> e diallyl sulfide/cn

E1	1	DIALLYL SUCCINYLSUCCINATE/CN
E2	1	DIALLYL SULFATE/CN
E3	1 -->	DIALLYL SULFIDE/CN
E4	1	DIALLYL SULFIDE-1,2-PROPANEDITHIOL POLYMER/CN
E5	1	DIALLYL SULFIDE-ETHANEDITHIOL POLYMER/CN
E6	1	DIALLYL SULFIDE-ETHYLENE COPOLYMER/CN
E7	1	DIALLYL SULFIDE-P-MENTHANEDITHIOL POLYMER/CN
E8	1	DIALLYL SULFIDE-PENTAERYTHRITOL

TETRAKIS (MERCAPTOACETATE) POLYMER/CN

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E9          1      DIALLYL SULFIDE-SULFUR DIOXIDE ALTERNATING
COPOLYMER/CN
E10         1      DIALLYL SULFIDE-TETRAMETHYLENEDITHIOL POLYMER/CN
E11         1      DIALLYL SULFIDE-TRIMETHYLENEDITHIOL POLYMER/CN
E12         1      DIALLYL SULFITE/CN

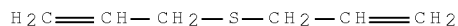
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L3          1 "DIALLYL SULFIDE"/CN

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SET COMMAND COMPLETED

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L3  ANSWER 1 OF 1  REGISTRY  COPYRIGHT 2009 ACS on STN
RN  592-88-1  REGISTRY
ED  Entered STN:  16 Nov 1984
CN  1-Propene, 3,3'-thiobis-  (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN  Allyl sulfide (6CI, 7CI, 8CI)
OTHER NAMES:
CN  Allyl monosulfide
CN  Bis(2-propenyl) sulfide
CN  Di(2-propenyl) sulfide
CN  Diallyl monosulfide
CN  Diallyl sulfide
CN  Diallyl thioether
CN  NSC 20947
CN  Oil garlic
CN  Thioallyl ether
DR  132879-26-6
MF  C6 H10 S
CI  COM
LC  STN Files:  AGRICOLA, ANABSTR, BEILSTEIN*, BIOSIS, BIOTECHNO, CA,
CAPLUS,
      CASREACT, CBNB, CHEMCATS, CHEMINFORMRX, CHEMLIST, CHEMSAFE, CIN,
CSCHEM,
      CSNB, DDFU, DETHERM*, DRUGU, EMBASE, GMELIN*, HSDB*, IFICDB,
IFIPAT,
      IFIUDB, IPA, MEDLINE, MRCK*, MSDS-OHS, PROMT, RTECS*, SPECINFO,
TOXCENTER, USPAT2, USPATFULL, USPATOLD
      (*File contains numerically searchable property data)
Other Sources:  DSL**, EINECS**, TSCA**
      (**Enter CHEMLIST File for up-to-date regulatory information)

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PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

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1092 REFERENCES IN FILE CA (1907 TO DATE)
  20 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
1095 REFERENCES IN FILE CAPLUS (1907 TO DATE)

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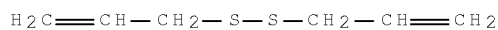
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E19      1      DI(2-PROPYLPENTYL) PHTHALATE/CN
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E21      1      DI(2-PYRIDYL)ACETYLENE/CN
E22      1      DI(2-PYRIDYL)BUTYLAMINE/CN
E23      1      DI(2-PYRIDYL)DISELENIDE/CN
E24      1      DI(2-PYRIDYL)DITELLURIDE/CN

=> s e15
L4      1 "DI(2-PROPENYL) DISULFIDE"/CN

=> d l4

L4      ANSWER 1 OF 1  REGISTRY  COPYRIGHT 2009 ACS on STN
RN      2179-57-9  REGISTRY
ED      Entered STN:  16 Nov 1984
CN      Disulfide, di-2-propenyl  (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN      Allyl disulfide (6CI, 7CI, 8CI)
OTHER NAMES:
CN      4,5-Dithia-1,7-octadiene
CN      Bis(2-propenyl) disulfide
CN      Di(2-propenyl) disulfide
CN      Diallyl disulfide
CN      Diallyl disulphide
CN      Dipropenyldisulfide
CN      Garlicin
CN      NSC 29228
MF      C6 H10 S2
CI      COM
LC      STN Files:  AGRICOLA, ANABSTR, BEILSTEIN*, BIOSIS, BIOTECHNO, CA,
CAPLUS,
          CASREACT, CHEMCATS, CHEMINFORMRX, CHEMLIST, CIN, CSCHEM, CSNB,
DDFU,
          DETHERM*, DRUGU, EMBASE, GMELIN*, HSDB*, IFICDB, IFIPAT, IFIUDB,
IPA,
          MEDLINE, MSDS-OHS, NAPRALERT, PROMT, RTECS*, SPECINFO,
TOXCENTER,
          USPAT2, USPATFULL, USPATOLD
          (*File contains numerically searchable property data)
Other Sources:  DSL**, EINECS**, TSCA**
          (**Enter CHEMLIST File for up-to-date regulatory information)

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PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

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5 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
1108 REFERENCES IN FILE CAPLUS (1907 TO DATE)

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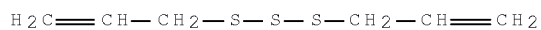
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E26 1 DI(2-PROPENYL) SULFIDE/CN
E27 1 --> DI(2-PROPENYL) TRISULFIDE/CN
E28 1 DI(2-PROPYL) 2-CHLOROETHOXYMETHYLPHOSPHONATE/CN
E29 1 DI(2-PROPYLPENTYL) PHTHALATE/CN
E30 1 DI(2-PROPYNYL)ETHYNYLFLUOROSILANE/CN
E31 1 DI(2-PYRIDYL)ACETYLENE/CN
E32 1 DI(2-PYRIDYL)BUTYLAMINE/CN
E33 1 DI(2-PYRIDYL)DISELENIDE/CN
E34 1 DI(2-PYRIDYL)DITELLURIDE/CN
E35 1 DI(2-PYRIDYL)ETHYLAMINE/CN
E36 1 DI(2-PYRIDYL)IODONIUM CHLORIDE/CN

=> s e27

L5 1 "DI(2-PROPENYL) TRISULFIDE"/CN

=> d l5

L5 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2009 ACS on STN
RN 2050-87-5 REGISTRY
ED Entered STN: 16 Nov 1984
CN Trisulfide, di-2-propen-1-yl (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Allyl trisulfide (6CI, 7CI, 8CI)
CN Trisulfide, di-2-propenyl (9CI)
OTHER NAMES:
CN Allitridin
CN Allitridum
CN Di(2-propenyl) trisulfide
CN Diallyl trisulfide
CN NSC 651936
MF C6 H10 S3
LC STN Files: AGRICOLA, ANABSTR, BEILSTEIN*, BIOSIS, BIOTECHNO, CA,
CAPLUS,
CASREACT, CHEMCATS, CHEMLIST, CSCHEM, DDFU, DRUGU, EMBASE,
IFICDB,
IFIPAT, IFIUDB, IPA, MEDLINE, MRCK*, NAPRALERT, PROMT, PROUSDDR,
RTECS*,
SPECINFO, TOXCENTER, USPAT2, USPATFULL
(*File contains numerically searchable property data)
Other Sources: DSL**, EINECS**
(**Enter CHEMLIST File for up-to-date regulatory information)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

476 REFERENCES IN FILE CA (1907 TO DATE)
4 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
480 REFERENCES IN FILE CAPLUS (1907 TO DATE)

=> e di(2-propenyl) tetrasulfide/cn

E37	1	DI(2-PROPENYL) DISULFIDE/CN
E38	1	DI(2-PROPENYL) SULFIDE/CN
E39	0 -->	DI(2-PROPENYL) TETRASULFIDE/CN
E40	1	DI(2-PROPENYL) TRISULFIDE/CN
E41	1	DI(2-PROPYL) 2-CHLOROETHOXYMETHYLPHOSPHONATE/CN
E42	1	DI(2-PROPYLPENTYL) PHTHALATE/CN
E43	1	DI(2-PROPYNYL)ETHYNYLFLUOROSILANE/CN
E44	1	DI(2-PYRIDYL)ACETYLENE/CN
E45	1	DI(2-PYRIDYL)BUTYLAMINE/CN
E46	1	DI(2-PYRIDYL)DISELENIDE/CN
E47	1	DI(2-PYRIDYL)DITELLURIDE/CN
E48	1	DI(2-PYRIDYL)ETHYLAMINE/CN

=>

=> e diallyl tetrasulfide/cn

E49	1	DIALLYL TETRAHYDRONAPHTHALENEDICARBOXYLATE
POLYMERS/CN		
E50	1	DIALLYL TETRAHYDROPHTHALATE/CN
E51	1 -->	DIALLYL TETRASULFIDE/CN
E52	1	DIALLYL THIODIPROPIONATE-ETHYL ACRYLATE POLYMER/CN
E53	1	DIALLYL THIODIPROPIONATE-METHYL METHACRYLATE
POLYMER/CN		
E54	1	DIALLYL THIOETHER/CN
E55	1	DIALLYL THIOPROPIONATE-DIETHYL FUMARATE POLYMER/CN
E56	1	DIALLYL THIOSULFINATE/CN
E57	1	DIALLYL THIOSULFOXIDE/CN
E58	1	DIALLYL TRANS-HEXAHYDROTEREPHTHALATE/CN
E59	1	DIALLYL TRIDECANEDIOATE/CN
E60	1	DIALLYL TRIMETHYLOLPROPANE ETHER/CN

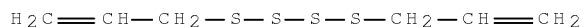
=> s e51

L6 1 "DIALLYL TETRASULFIDE"/CN

=> d l6

L6 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2009 ACS on STN
RN 2444-49-7 REGISTRY
ED Entered STN: 16 Nov 1984
CN Tetrasulfide, di-2-propen-1-yl (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Allyl tetrasulfide (7CI)
CN Tetrasulfide, di-2-propenyl (9CI)
CN Tetrasulfide, diallyl (8CI)
OTHER NAMES:
CN Diallyl tetrasulfide
CN ICD 1585
MF C6 H10 S4
LC STN Files: AGRICOLA, ANABSTR, BEILSTEIN*, BIOSIS, CA, CAPLUS,
CASREACT,

CHEMLIST, MEDLINE, NAPRALERT, RTECS*, SPECINFO, TOXCENTER,
USPATFULL
(*File contains numerically searchable property data)
Other Sources: EINECS**
(**Enter CHEMLIST File for up-to-date regulatory information)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

104 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
104 REFERENCES IN FILE CAPLUS (1907 TO DATE)

=> e allicin/cn

E61	1	ALLIARINOSIDE/CN
E62	1	ALLIAROSIDE/CN
E63	1 -->	ALLICIN/CN
E64	1	ALLIDOCHLOR/CN
E65	1	ALLIE EXPRESS/CN
E66	1	ALLIED 1220/CN
E67	1	ALLIED 2605 S2/CN
E68	1	ALLIED 2605SC/CN
E69	1	ALLIED 272/CN
E70	1	ALLIED 2918/CN
E71	1	ALLIED 629A/CN
E72	1	ALLIED 820/CN

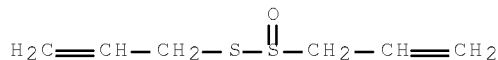
=> s e63

L7 1 ALLICIN/CN

=> d 17

L7 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2009 ACS on STN
RN 539-86-6 REGISTRY
ED Entered STN: 16 Nov 1984
CN 2-Propene-1-sulfinothioic acid, S-2-propen-1-yl ester (CA INDEX
NAME)
OTHER CA INDEX NAMES:
CN 2-Propene-1-sulfinic acid, thio-, S-allyl ester (7CI, 8CI)
CN 2-Propene-1-sulfinothioic acid, S-2-propenyl ester (9CI)
CN Allicin (6CI)
OTHER NAMES:
CN Alliosan
CN Allisure Liquid
CN Diallyl thiosulfinate
CN Thio-2-propene-1-sulfinic acid S-allyl ester
MF C6 H10 O S2
CI COM
LC STN Files: ADISINSIGHT, ADISNEWS, AGRICOLA, ANABSTR, BEILSTEIN*,
BIOSIS,
BIOTECHNO, CA, CAPLUS, CASREACT, CBNB, CHEMCATS, CHEMLIST, CIN,

CSCHEM,
 DDFU, DRUGU, EMBASE, IFICDB, IFIPAT, IFIUDB, IMSPRODUCT, IPA,
 MEDLINE,
 MRCK*, NAPRALERT, PHAR, PROMT, PROUSDDR, RTECS*, SPECINFO,
 SYNTHLINE,
 TOXCENTER, USPAT2, USPATFULL, USPATOLD
 (*File contains numerically searchable property data)
 Other Sources: EINECS**
 (**Enter CHEMLIST File for up-to-date regulatory information)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

827 REFERENCES IN FILE CA (1907 TO DATE)
 14 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
 832 REFERENCES IN FILE CAPLUS (1907 TO DATE)

=> e alliin/cn
 E73 1 ALLIFRIDIN/CN
 E74 1 ALLIGATOR BRADYKININ-RELATED PEPTIDE/CN
 E75 1 --> ALLIIN/CN
 E76 1 ALLIIN HEMIHYDRATE/CN
 E77 1 ALLIIN LYASE/CN
 E78 1 ALLIIN LYASE (AEGILOPS TAUSCHII ISOLATE AUS18913
 CLONE BAC M
 11 SEQUENCE HOMOLOG)/CN
 E79 1 ALLIIN LYASE (ARABIDOPSIS THALIANA CLONE RAFL07-07-
 C23 (R108
 02) GENE AT4G24670)/CN
 E80 1 ALLIIN LYASE-LIKE PROTEIN (MARCHANTIA POLYMORPHA
 STRAIN E CL
 ONE PMM2D3/RS GENE M2D3.1)/CN
 E81 1 ALLIINASE/CN
 E82 1 ALLIINASE (ALLIUM CEPA)/CN
 E83 1 ALLIINASE (ALLIUM TUBEROSUM)/CN
 E84 1 ALLIINASE (ARABIDOPSIS THALIANA CLONE F24J13 GENE
 F24J13.13)
 /CN

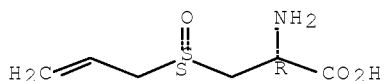
=> s e75
 L8 1 ALLIIN/CN

=> d l8

L8 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2009 ACS on STN
 RN 556-27-4 REGISTRY
 ED Entered STN: 16 Nov 1984
 CN L-Cysteine, S-2-propen-1-yl-, S-oxide, [S(S)]- (CA INDEX NAME)
 OTHER CA INDEX NAMES:
 CN Alanine, 3-(allylsulfinyl)- (7CI)

CN Alanine, 3-(allylsulfinyl)-, (S)-L- (8CI)
 CN L-Alanine, 3-(2-propenylsulfinyl)-, (S)-
 CN L-Alanine, 3-[(S)-2-propenylsulfinyl]- (9CI)
 OTHER NAMES:
 CN (+)-L-Alliin
 CN Alliin
 CN S-Allyl-L-cysteine-(+)-sulfoxide
 FS STEREOSEARCH
 DR 23358-38-5
 MF C6 H11 N O3 S
 CI COM
 LC STN Files: ADISNEWS, AGRICOLA, ANABSTR, BEILSTEIN*, BIOSIS,
 BIOTECHNO,
 CA, CAPLUS, CASREACT, CBNB, CHEMCATS, CHEMLIST, CIN, CSCHEM,
 DDFU,
 DRUGU, EMBASE, IPA, MRCK*, NAPRALERT, PROMT, SPECINFO,
 SYNTHLINE,
 TOXCENTER, USPAT2, USPATFULL
 (*File contains numerically searchable property data)
 Other Sources: EINECS**
 (**Enter CHEMLIST File for up-to-date regulatory information)

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

378 REFERENCES IN FILE CA (1907 TO DATE)
 6 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
 381 REFERENCES IN FILE CAPLUS (1907 TO DATE)

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=> s (13 and 14 and 15 and 16 and 17 and 18)
 1095 L3
 1108 L4
 480 L5
 104 L6
 832 L7
 381 L8
 L10 4 (L3 AND L4 AND L5 AND L6 AND L7 AND L8)

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L10 ANSWER 1 OF 4 CAPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 2008:1253779 CAPLUS Full-text
 DOCUMENT NUMBER: 150:29667

TITLE: Naturally occurring reactive sulfur species,
 their activity against Caco-2 cells, and possible
 modes of biochemical action. [Erratum to document cited
 in CA149:487848]
 AUTHOR(S): Anwar, Awais; Burkholz, Torsten; Scherer,
 Christiane; Abbas, Muhammad; Lehr, Claus-Michael;
 Diederich, Marc; Jacob, Claus
 CORPORATE SOURCE: Division of Bioorganic Chemistry, School of
 Pharmacy, Saarland University, Saarbruecken, Germany
 SOURCE: Journal of Sulfur Chemistry (2008), 29(5), 573
 CODEN: JSCOFC; ISSN: 1741-5993
 PUBLISHER: Taylor & Francis Ltd.
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 AB On page 251, the following name and affiliation was omitted from
 the author list: Nicole Daum, Department of Biopharmaceutics and
 Pharmaceutical Technology, School of Pharmacy, Saarland
 University, Saarbruecken, Germany.

L10 ANSWER 2 OF 4 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2008:756920 CAPLUS Full-text
 DOCUMENT NUMBER: 149:487848
 TITLE: Naturally occurring reactive sulfur species,
 their activity against Caco-2 cells, and possible
 modes of biochemical action
 AUTHOR(S): Anwar, Awais; Burkholz, Torsten; Scherer,
 Christiane; Abbas, Muhammad; Lehr, Claus-Michael;
 Diederich, Marc; Jacob, Claus
 CORPORATE SOURCE: Division of Bioorganic Chemistry, School of
 Pharmacy, Saarland University, Saarbruecken, Germany
 SOURCE: Journal of Sulfur Chemistry (2008), 29(3-4),
 251-268
 CODEN: JSCOFC; ISSN: 1741-5993
 PUBLISHER: Taylor & Francis Ltd.
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 AB Natural sulfur compds. from plants, bacteria, fungi, and animals
 frequently exhibit interesting biol. activities, such as
 antioxidant, antimicrobial, and anticancer activity. Considering
 the recent developments in medicine (e.g. oxidative stress in
 aging, antibiotic resistant bacteria, selective anticancer agents)
 and agriculture (e.g. 'green' pesticides), several of these
 compds. have become the focus of interdisciplinary research.
 Among the various sulfur agents isolated to date, polysulfides,
 such as diallyl trisulfide and diallyl tetrasulfide from garlic,

are of particular interest, since they combine an unusual chemical and biochem. mode(s) of action with a distinct biol. activity, which includes antimicrobial activity and cytotoxicity against certain cancer cells. In many cases, the biol. activity of these compds. is well established, but the underlying causes for this activity are hardly known. As part of our investigations, we have now confirmed the activity of diallyl trisulfide and diallyl tetrasulfide against the fairly 'robust' Caco-2 colon cancer cell line. At the concns. used, the activity observed for tri- and tetrasulfide is considerably higher than that of disulfide, while monosulfide is virtually inactive. Controls with the long chain carbon analog 1,9-decadiene count against solely lipophilic effects of diallyl tetrasulfide, and together with the 'ranking' of activity, point toward a 'special' sulfur redox chemical that emerges when shifting from di- to trisulfide. This special reactivity of polysulfides has previously been associated with certain oxidizing properties of the polysulfides. The electrochem. studies and thiol oxidation assays conducted as part of this study, however, count against the notion of diallyl trisulfide and diallyl tetrasulfide as effective oxidants. On the contrary, the rather neg. oxidation and reduction potentials associated with these agents point toward a reducing chemical, which is confirmed in the nitro tetrazolium blue assay: the latter seems to indicate dioxygen reduction to the superoxide radical anion, although other reductive events or H₂S release cannot be ruled out at this point. It is therefore likely that diallyl trisulfide and diallyl tetrasulfide are reduced inside the cancer cells to perthiols and hydropolysulfides, which in turn trigger a lethal oxidative burst, for instance via superoxide radical anion formation.

REFERENCE COUNT: 32 THERE ARE 32 CITED REFERENCES AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 3 OF 4 CAPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 2005:492122 CAPLUS Full-text
 DOCUMENT NUMBER: 143:2646
 TITLE: Diallyl polysulfides from garlic as insecticides and

acaricides
 INVENTOR(S): Gaudout, David; Inisan, Claude; Durechou, Serge;

Megard, Denis
 PATENT ASSIGNEE(S): Diana Vegetal, Fr.
 SOURCE: Fr. Demande, 20 pp.
 CODEN: FRXXBL

DOCUMENT TYPE: Patent
 LANGUAGE: French

FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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FR 2863144	A1	20050610	FR 2003-14394	
20031209				

FR 2863144 B1 20060804
CA 2548601 A1 20050623 CA 2004-2548601
20041209
WO 2005055713 A2 20050623 WO 2004-FR3173
20041209
WO 2005055713 A3 20051222
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ,
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GB, GD,
GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR,
KZ, LC,
LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ,
NA, NI,
NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK,
SL, SY,
TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA,
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DE, DK,
EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL,
PL, PT,
RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ,
GW, ML,
MR, NE, SN, TD, TG

EP 1691616 A2 20060823 EP 2004-805676
20041209
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE,
MC, PT,
IE, SI, LT, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK, IS

BR 2004017404 A 20070508 BR 2004-17404
20041209
US 20080214678 A1 20080904 US 2008-582043
20080317
PRIORITY APPLN. INFO.: FR 2003-14394 A
20031209
WO 2004-FR3173 W

20041209
AB Compns. containing diallyl sulfide, diallyl disulfide, diallyl trisulfide and diallyl tetrasulfide, as well γ -glutamyl-S-allylcysteine, allicin and alliin, extracted from garlic, are insecticide and acaricide.

REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 4 OF 4 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 1992:166029 CAPLUS Full-text
DOCUMENT NUMBER: 116:166029
ORIGINAL REFERENCE NO.: 116:27839a,27842a
TITLE: Inhibition of whole blood platelet-aggregation by
commercial compounds in garlic clove extracts and

garlic products
 AUTHOR(S): Lawson, Larry D.; Ransom, Dennis K.; Hughes,
 Bronwyn
 G.
 CORPORATE SOURCE: Madaus Murdock, Inc., Springville, UT, 84663,
 USA
 SOURCE: Thrombosis Research (1992), 65(2), 141-56
 CODEN: THBRAA; ISSN: 0049-3848
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 AB The inhibitory effects of adenosine and a number of quant.
 determined organosulfur compds. derived from garlic cloves or com.
 garlic prepns. on collagen-stimulated in vitro platelet
 aggregation in whole blood determined. An estimation of the
 antiaggregatory activity of several brands of the major types of
 com. garlic prepns. was determined from the activities of the
 individual compds. present in each sample. In platelet-rich
 plasma (PRP) most of the antiaggregatory activity of garlic clove
 homogenates was due to adenosine; however, in whole blood neither
 adenosine nor the polar fraction had any effect, and all of the
 antiaggregatory activity was due to allicin and other
 thiosulfinates. Allicin was equally active in whole blood and
 PRP. Among garlic brands, there was a several-fold variation in
 content of the organosulfur compds. and activity for all types of
 garlic procedure tested. The best garlic powder tablets were
 equally as active as clove homogenates, whereas steam-distilled
 oils were 35% as active and oil-macerates (due to low content)
 were only 12% as active. A garlic product aged many months in
 aqueous alc. had no activity. For steam-distilled oils, most of
 the activity was due to diallyl trisulfide. For the oil-
 macerates, most of the activity was due to the vinyl dithiins.
 Ajoene, an exclusive component of the oil-macerates, had highest
 specific activity of all the compds. tested but, because of its
 low concns., accounted for only 13% of the activity of diallyl
 trisulfide and 3% of the activity of allicin in the product.
 Compds. which may be active in vivo are discussed.

<http://www.cas.org/legal/infopolicy.html>

This file contains CAS Registry Numbers for easy and accurate
 substance identification.

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=> s 'garlic extract?'
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      11415 'GARLIC'
           ('GARLIC' OR 'GARLICS')
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      54955 'EXTRACTS'
     104325 'EXTRACT'
           ('EXTRACT' OR 'EXTRACTS')
     369802 'EXT'
     250103 'EXTS'
     551904 'EXT'
           ('EXT' OR 'EXTS')
     588491 'EXTRACT'
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L11      913 'GARLIC EXTRACT?'
          ('GARLIC'(W)'EXTRACT')

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      122464 INSECTICID?
      12559 BIOCID?
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L12      25 L11 AND (PESTICID? OR INSECTICID? OR BIOCID? OR
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L13  ANSWER 1 OF 14  CAPLUS  COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER:      2007:88128  CAPLUS  Full-text
DOCUMENT NUMBER:      146:168847
TITLE:                Foamable composition combining a polar solvent
and a
                      hydrophobic carrier
INVENTOR(S):          Tamarkin, Dov; Friedman, Doron; Eini, Meir;
Besonov,
                      Alex
PATENT ASSIGNEE(S):    Foamix Ltd., Israel
SOURCE:               U.S. Pat. Appl. Publ., 20pp., Cont.-in-part of
U.S.
                      Ser. No. 532,618.
                      CODEN: USXXCO
DOCUMENT TYPE:         Patent
LANGUAGE:              English
FAMILY ACC. NUM. COUNT: 33
PATENT INFORMATION:

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US 20070020213	A1	20070125	US 2006-488989	
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WO 2004037225	A2	20040506	WO 2003-IB5527	
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WO 2004037225	A3	20041229		
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GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,				
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OM, PH,				
PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR,				
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US	20050031547	A1	20050210	US 2004-835505
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US	20050069566	A1	20050331	US 2004-911367
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US	20050074414	A1	20050407	US 2004-922358
20040820 <--				
AU	2004313285	A1	20050929	AU 2004-313285
20041216 <--				
ZA	2005003298	A	20060830	ZA 2005-3298
20050425 <--				
US	20050271596	A1	20051208	US 2005-124676
20050509 <--				
US	20060140984	A1	20060629	US 2005-532618
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AU	2006201878	A1	20070927	AU 2006-201878
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WO	2007085902	A2	20070802	WO 2006-IB4119
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KN, KP,				
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US	20070280891	A1	20071206	US 2006-645444
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 US 20080050317 A1 20080228 US 2007-894668
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 20070820
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 20031024 <--
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 US 2004-835505 A2
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 20040804 <--
 US 2004-922358 A2
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 US 2005-124676 A2
 20050509
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 20051222

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20050706	US 2005-696878P	P
20060313	US 2006-781868P	P
20060607	US 2006-811627P	P
20060706	US 2006-481596	A2
20060707	US 2006-482596	A
20060719	US 2006-488989	A2
20070126	US 2007-897638P	P
20070202	US 2007-899176P	P
20070313	US 2007-717897	A2
20070607	US 2007-811140	A1
20070607	WO 2007-IB3463	W

AB The present invention relates to a foamable vehicle or cosmetic or pharmaceutical composition, comprising: an organic carrier, at 10-0% by weight, wherein the organic carrier concurrently comprises: (i) at least one hydrophobic organic carrier, and (ii) at least one polar solvent; (2) at least one surfactant; (3) water; and (4) at least one liquefied or compressed gas propellant at 3-25% by weight of the total composition. The present invention further provides a method of treating, alleviating or preventing a disorder of mammalian subject, comprising administering the above-mentioned compns. to an afflicted target site.

TI Foamable composition combining a polar solvent and a hydrophobic carrier

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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L13 ANSWER 2 OF 14 CAPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 2005:1166603 CAPLUS Full-text
 DOCUMENT NUMBER: 143:381271
 TITLE: Pesticidal composition comprising salicylaldehyde
 INVENTOR(S): Tsivion, Yoram
 PATENT ASSIGNEE(S): Yoram Tsivion, Israel
 SOURCE: Brit. UK Pat. Appl., 11 pp.
 CODEN: BAXXDU
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 2
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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GB 2413494	A	20051102	GB 2004-9205	

20040426 <--
 WO 2005102024 A2 20051103 WO 2005-IL415
 20050420 <--
 WO 2005102024 A3 20051215
 W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ,
 CA, CH,
 CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,
 GB, GD,
 GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP,
 KR, KZ,
 LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX,
 MZ, NA,
 NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG,
 SK, SL,
 SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN,
 YU, ZA,
 ZM, ZW
 RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM,
 ZW, AM,
 AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ,
 DE, DK,
 EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL,
 PL, PT,
 RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ,
 GW, ML,
 MR, NE, SN, TD, TG
 EP 1744624 A2 20070124 EP 2005-733708
 20050420 <--
 R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR,
 HU, IE,
 IS, IT, LI, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR
 US 20080311233 A1 20081218 US 2006-568327
 20061026 <--
 PRIORITY APPLN. INFO.: GB 2004-9205 A
 20040426 <-- GB 2004-14153 A
 20040624 <-- WO 2005-IL415 W
 20050420
 AB A composition for the control of slugs or butterfly and moth
 larvae comprises a mixture of salicylaldehyde and a suitable
 surfactant. The same composition together with garlic extract may
 also be used to control earthworms. The composition may be
 applied as a mixture or dispersion in water.
 TI Pesticidal composition comprising salicylaldehyde
 REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE
 FOR THIS
 RECORD. ALL CITATIONS AVAILABLE IN THE
 RE FORMAT
 TI Pesticidal composition comprising salicylaldehyde
 PATENT NO. KIND DATE APPLICATION NO. DATE

 PI GB 2413494 A 20051102 GB 2004-9205
 20040426 <--
 WO 2005102024 A2 20051103 WO 2005-IL415
 20050420 <--

WO 2005102024 A3 20051215
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ,
CA, CH,
CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,
GB, GD,
GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP,
KR, KZ,
LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX,
MZ, NA,
NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG,
SK, SL,
SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN,
YU, ZA,
ZM, ZW
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM,
ZW, AM,
AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ,
DE, DK,
EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL,
PL, PT,
RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ,
GW, ML,
MR, NE, SN, TD, TG

L13 ANSWER 3 OF 14 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2005:492122 CAPLUS Full-text
DOCUMENT NUMBER: 143:2646
TITLE: Diallyl polysulfides from garlic as
insecticides and acaricides
INVENTOR(S): Gaudout, David; Inisan, Claude; Durechou,
Serge;
Megard, Denis
PATENT ASSIGNEE(S): Diana Vegetal, Fr.
SOURCE: Fr. Demande, 20 pp.
CODEN: FRXXBL
DOCUMENT TYPE: Patent
LANGUAGE: French
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	----	-----	-----	-----
FR 2863144	A1	20050610	FR 2003-14394	
20031209 <--				
FR 2863144	B1	20060804		
CA 2548601	A1	20050623	CA 2004-2548601	
20041209 <--				
WO 2005055713	A2	20050623	WO 2004-FR3173	
20041209 <--				
WO 2005055713	A3	20051222		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR,				

KZ, LC,
 NA, NI,
 SL, SY,
 ZM, ZW
 RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM,
 ZW, AM,
 DE, DK,
 PL, PT,
 GW, ML,
 LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ,
 NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK,
 TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA,
 AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ,
 EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL,
 RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ,

MR, NE, SN, TD, TG
 EP 1691616 A2 20060823 EP 2004-805676
 20041209 <--
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE,
 MC, PT,
 IE, SI, LT, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK, IS
 BR 2004017404 A 20070508 BR 2004-17404
 20041209 <--
 US 20080214678 A1 20080904 US 2008-582043
 20080317 <--
 PRIORITY APPLN. INFO.: FR 2003-14394 A
 20031209 <--
 WO 2004-FR3173 W

20041209 <--
 AB Compns. containing diallyl sulfide, diallyl disulfide, diallyl trisulfide and diallyl tetrasulfide, as well γ -glutamyl-S-allylcysteine, allicin and alliin, extracted from garlic, are insecticide and acaricide.

L13 ANSWER 4 OF 14 CAPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 2004:932509 CAPLUS Full-text
 DOCUMENT NUMBER: 142:129052
 TITLE: Agricultural pesticide and producing method thereof
 INVENTOR(S): Kang, Jun Gu
 PATENT ASSIGNEE(S): S. Korea
 SOURCE: Repub. Korean Kongkae Taeho Kongbo, No pp. given
 CODEN: KRXXA7
 DOCUMENT TYPE: Patent
 LANGUAGE: Korean
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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KR 2002008485	A	20020131	KR 2000-41689	
20000720 <--				
PRIORITY APPLN. INFO.:			KR 2000-41689	
20000720 <--				

AB An agricultural pesticide and a producing method thereof are provided, which pesticide has the improved germicidal activity and does not contain heavy metals or antibiotics which may be accumulated in human body or cause the drug tolerance. The agricultural pesticide contains 35 to 45 weight% of garlic, 45 to 55 weight% of sterilized water and 5 to 15 weight% of citric acid. The method for producing the agricultural pesticide comprises the steps of: pulverizing 35 to 45 weight% of garlic; adding 45 to 55 weight% of sterilized water into the pulverized garlic; storing the mixture at room temperature for 3 days; extracting the mixture; and adding 5 to 15 weight% of the diluted citric acid into the garlic extract

TI Agricultural pesticide and producing method thereof

TI Agricultural pesticide and producing method thereof

PI KR 2002008485 A 20020131

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PI	KR 2002008485	A	20020131	KR 2000-41689
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20000720 <--
PRAI KR 2000-41689 20000720 <--

AB An agricultural pesticide and a producing method thereof are provided, which pesticide has the improved germicidal activity and does not contain heavy metals or antibiotics which may be accumulated in human body or cause the drug tolerance. The agricultural pesticide contains 35 to 45 weight% of garlic, 45 to 55 weight% of sterilized water and 5 to 15 weight% of citric acid. The method for producing the agricultural pesticide comprises the steps of: pulverizing 35 to 45 weight% of garlic; adding 45 to 55 weight% of sterilized water into the pulverized garlic; storing the mixture at room temperature for 3 days; extracting the mixture; and adding 5 to 15 weight% of the diluted citric acid into the garlic extract

L13 ANSWER 5 OF 14 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2003:71735 CAPLUS Full-text

DOCUMENT NUMBER: 138:102386

TITLE: Pesticidal garlic composition for foliar applications

INVENTOR(S): Arand, Anthony; Arand, John K.

PATENT ASSIGNEE(S): USA

SOURCE: U.S., 21 pp.
CODEN: USXXAM

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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US 6511674	B1	20030128	US 1998-99480
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19980617 <--
PRIORITY APPLN. INFO.: US 1998-99480
19980617 <--

AB An agricultural composition comprises a first component comprising a garlic extract solution having a quantifiable concentration of greater than ten percent by weight of a garlic extract, the garlic extract comprising allitin, allicin, diallyl disulfide, and DMSO; and a second component comprising an agricultural treatment agent of one of a pesticide, miticide, fungicide, antibiotic, herbicide, defoliant, nutrient, adjuvant, and water.

TI Pesticidal garlic composition for foliar applications

REFERENCE COUNT: 27 THERE ARE 27 CITED REFERENCES AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE

RE FORMAT

TI Pesticidal garlic composition for foliar applications

PI US 6511674 B1 20030128

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PI US 6511674	B1	20030128	US 1998-99480	
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19980617 <--

PRAI US 1998-99480 19980617 <--

AB An agricultural composition comprises a first component comprising a garlic extract solution having a quantifiable concentration of greater than ten percent by weight of a garlic extract, the garlic extract comprising allitin, allicin, diallyl disulfide, and DMSO; and a second component comprising an agricultural treatment agent of one of a pesticide, miticide, fungicide, antibiotic, herbicide, defoliant, nutrient, adjuvant, and water.

ST garlic ext pesticide

IT Pesticide formulations

(adjuvants; pesticidal garlic composition for foliar applications

comprising)

IT Allium sativum

L13 ANSWER 6 OF 14 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2002:705294 CAPLUS Full-text

DOCUMENT NUMBER: 138:155391

TITLE: Manufacture of antibacterial/pesticidal soap containing garlic extract

INVENTOR(S): Jeong, Sook Ja

PATENT ASSIGNEE(S): S. Korea

SOURCE: Repub. Korean Kongkae Taeho Kongbo, No pp. given

CODEN: KRXXA7

DOCUMENT TYPE: Patent

LANGUAGE: Korean

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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KR 2001010118	A	20010205	KR 1999-28825	
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19990716 <--

PRIORITY APPLN. INFO.: KR 1999-28825

19990716 <--

AB Antibacterial/pesticidal soap composition nonirritating to skin is manufactured by (i) soaking garlic in alginic acid solution in order to deodorize intrinsic odor of garlic, followed by crushing deodorized garlic, (ii) adding double amount of H2O to the crushed garlic followed by separation of the extract by centrifugation, and (iii) adding 0.1-5.0% of garlic extract obtained from step (ii) to conventional soap composition

TI Manufacture of antibacterial/pesticidal soap containing garlic extract

TI Manufacture of antibacterial/pesticidal soap containing garlic extract

PI	KR 2001010118 A	20010205			
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	-----	----	-----	-----	----

PI	KR 2001010118	A	20010205	KR 1999-28825	
	19990716	<--			

PRAI	KR 1999-28825		19990716	<--	
------	---------------	--	----------	-----	--

AB Antibacterial/pesticidal soap composition nonirritating to skin is manufactured by (i) soaking garlic in alginic acid solution in order to deodorize intrinsic odor of garlic, followed by crushing deodorized garlic, (ii) adding double amount of H2O to the crushed garlic followed by separation of the extract by centrifugation, and (iii) adding 0.1-5.0% of garlic extract obtained from step (ii) to conventional soap composition

ST soap antibacterial pesticidal garlic ext

L13 ANSWER 7 OF 14 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2001:3240 CAPLUS Full-text

DOCUMENT NUMBER: 134:160081

TITLE: The microaerophilic flagellate Giardia intestinalis:

antigiardial Allium sativum (garlic) is an effective

AUTHOR(S): Harris, Janine C.; Plummer, Sue; Turner, Michael P.;

Lloyd, David
CORPORATE SOURCE: Microbiology Group, School of Biosciences, Cardiff

SOURCE: University, Cardiff, CF10 3TL, UK
Microbiology (Reading, United Kingdom) (2000), 146(12), 3119-3127

CODEN: MROBEO; ISSN: 1350-0872
PUBLISHER: Society for General Microbiology

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Whole garlic (*Allium sativum* L.) extract and some of its components were assayed for antigiardial activity. Whole garlic extract gave an IC50 at 24 h of 0.3 mg ml⁻¹. Most of the components assayed were inhibitory to the organism, especially allyl alc. and allyl mercaptan, with IC50 values of 7 µg ml⁻¹ and 37 µg ml⁻¹ resp. Studies with calcofluor white indicated that whole garlic and allyl alc. collapse the transmembrane electrochem. membrane potential ($\Delta\psi$) of the organism, as indicated by uptake of the fluorochrome. Electron microscopy allowed the morphol. changes that occur with garlic inhibition to be recorded.

Both the surface topog. and internal architecture of the organism changed during incubation with the biocides. Both whole garlic and allyl alc. resulted in fragmentation of the disk and an overexpression of disk microribbons, internalization of flagella, vacuole formation and an increase in distended vesicles. Allyl mercaptan, however, only gave an increase in distended vesicles, suggesting that this biocide has a different mode of action.

TI The microaerophilic flagellate *Giardia intestinalis*: *Allium sativum*

(garlic) is an effective anti-giardial

REFERENCE COUNT: 42 THERE ARE 42 CITED REFERENCES AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE

RE FORMAT

SO Microbiology (Reading, United Kingdom) (2000), 146(12), 3119-3127

CODEN: MROBEO; ISSN: 1350-0872

AB Whole garlic (*Allium sativum* L.) extract and some of its components were assayed for anti-giardial activity. Whole garlic extract gave an IC₅₀ at 24 h of 0.3 mg ml⁻¹. Most of the components assayed were inhibitory to the organism, especially allyl alc. and allyl mercaptan, with IC₅₀ values of 7 µg ml⁻¹ and 37 µg ml⁻¹ resp. Studies with calcofluor white indicated that whole garlic and allyl alc. collapse the transmembrane electrochem. membrane potential ($\Delta\psi$) of the organism, as indicated by uptake of the fluorochrome. Electron microscopy allowed the morphol. changes that occur with garlic inhibition to be recorded. Both the surface topog. and internal architecture of the organism changed during incubation with the biocides. Both whole garlic and allyl alc. resulted in fragmentation of the disk and an overexpression of disk microribbons, internalization of flagella, vacuole formation and an increase in distended vesicles. Allyl mercaptan, however, only gave an increase in distended vesicles, suggesting that this biocide has a different mode of action.

ST anti-giardial activity garlic ext component; *Giardia* inhibition garlic ext component

IT Cell morphology

Garlic (*Allium sativum*)

Giardia lamblia

Protozoacides

(anti-giardial activity of garlic extract and components)

IT Electric potential

(biol., electrochem.; anti-giardial activity of garlic extract and components)

IT 75-18-3, Methyl sulfide 107-18-6, Allyl alcohol, biological studies

592-88-1, Diallyl sulfide 624-92-0, Dimethyl disulfide 629-19-6,

Dipropyl disulfide 870-23-5, Allyl mercaptan 2179-57-9, Diallyl

disulfide 2179-60-4, Methyl propyl disulfide 3877-15-4, Methyl propyl

sulfide 10152-76-8, Allyl methyl sulfide

RL: BAC (Biological activity or effector, except adverse); BSU (Biological

study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES
(Uses)
(antigiardial activity of garlic extract and components)

L13 ANSWER 8 OF 14 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 1998:364918 CAPLUS Full-text
DOCUMENT NUMBER: 129:13494
ORIGINAL REFERENCE NO.: 129:2831a,2834a
TITLE: Pesticidal fumigant for hothouses
INVENTOR(S): Ohtsuka, Riichiro
PATENT ASSIGNEE(S): Abion Corporation Co. Ltd., Japan
SOURCE: Eur. Pat. Appl., 10 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	----	-----	-----	----
EP 843965	A1	19980527	EP 1997-309340	
19971120 <--				
EP 843965	B1	20021218		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,				
IE, SI, LT, LV, FI, RO				
JP 10152403	A	19980609	JP 1996-311809	
19961122 <--				
JP 3108027	B2	20001113		
CA 2220211	A1	19980522	CA 1997-2220211	
19971105 <--				
CA 2220211	C	20030415		
ES 2188875	T3	20030701	ES 1997-309340	
19971120 <--				
CN 1191675	A	19980902	CN 1997-122933	
19971121 <--				
CN 1124787	C	20031022		
PRIORITY APPLN. INFO.:			JP 1996-311809	A
19961122 <--				
AB	The title fumigant comprises cinnamic aldehyde, hinokitiol, allylmustard oil and/or garlic extract The fumigant is delivered using and air boiler or elec. heating plate.			
TI	Pesticidal fumigant for hothouses			
REFERENCE COUNT:	15	THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS		

RECORD. ALL CITATIONS AVAILABLE IN THE

RE FORMAT

TI Pesticidal fumigant for hothouses

PI EP 843965 A1 19980527

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	----	-----	-----	----
EP 843965	A1	19980527	EP 1997-309340	
19971120 <--				

EP 843965 B1 20021218
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE,
 MC, PT,
 IE, SI, LT, LV, FI, RO
 JP 10152403 A 19980609 JP 1996-311809
 19961122 <--
 JP 3108027 B2 20001113
 CA 2220211 A1 19980522 CA 1997-2220211
 19971105 <--
 CA 2220211 C 20030415
 ES 2188875 T3 20030701 ES 1997-309340
 19971120 <--
 CN 1191675 A 19980902 CN 1997-122933
 19971121 <--
 CN 1124787 C 20031022
 PRAI JP 1996-311809 A 19961122 <--
 AB The title fumigant comprises cinnamic aldehyde, hinokitiol,
 allylmustard oil and/or garlic extract The fumigant is delivered
 using and air boiler or elec. heating plate.
 ST pesticide fumigant hothouse
 IT Fumigants
 Pesticides
 (pesticidal fumigant for hothouses)
 IT Garlic (Allium sativum)
 (pesticidal fumigant for hothouses containing extract of)
 IT Greenhouses
 (pesticide fumigant for hothouses)
 IT 57-06-7, Allylmustard oil 104-55-2, Cinnamic aldehyde, 499-44-
 5,
 Hinokitiol
 RL: AGR (Agricultural use); BIOL (Biological study); USES (Uses)
 (pesticidal fumigant for hothouses)

L13 ANSWER 9 OF 14 CAPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 1997:456953 CAPLUS Full-text
 DOCUMENT NUMBER: 127:62050
 ORIGINAL REFERENCE NO.: 127:11785a,11788a
 TITLE: Production of vinegar-based liquid, harmless
 to humans

and livestock, for controlling insects in
 fruits and
 vegetables
 INVENTOR(S): Kurozumi, Takuhiro; Handa, Katsuki
 PATENT ASSIGNEE(S): Mannen Vinegar Goshigaisha, Japan; Kurozumi,
 Takuhiro
 SOURCE: Jpn. Kokai Tokkyo Koho, 3 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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JP 09132510	A	19970520	JP 1994-182719	
19940629 <--				

PRIORITY APPLN. INFO.:

JP 1994-182719

19940629 <--

AB Nonpolluting liqs. that growers can use to control insect pests in fruits and vegetables are obtained by mixing vinegar and suitable amts. of other specific materials, i.e., garlic extract, cayenne pepper, salad oil, citric acid, chitosan, and emulsifier and diluting the liquid produced. For example, vinegar 800-850, garlic extract 1-5, cayenne pepper extract 3-8, and salad oil 5-15 mL and citric acid 80-130, chitosan 10-30, and emulsifier 40-80 g are mixed and the liquid is diluted by a factor of 100 and sprayed on peach leaves.

TI Production of vinegar-based liquid, harmless to humans and livestock, for

controlling insects in fruits and vegetables

PI JP 09132510 A 19970520 Heisei

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PI	JP 09132510	A	19970520	JP 1994-182719
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19940629 <--

PRAI JP 1994-182719 19940629 <--

AB Nonpolluting liqs. that growers can use to control insect pests in fruits and vegetables are obtained by mixing vinegar and suitable amts. of other specific materials, i.e., garlic extract, cayenne pepper, salad oil, citric acid, chitosan, and emulsifier and diluting the liquid produced. For example, vinegar 800-850, garlic extract 1-5, cayenne pepper extract 3-8, and salad oil 5-15 mL and citric acid 80-130, chitosan 10-30, and emulsifier 40-80 g are mixed and the liquid is diluted by a factor of 100 and sprayed on peach leaves.

IT Insect repellents

Insecticides

Peach (Prunus persica)

Vinegar

(environmentally safe vinegar-based liquid for controlling

insect pests

in fruits and vegetables)

L13 ANSWER 10 OF 14 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1997:325497 CAPLUS Full-text

DOCUMENT NUMBER: 126:302630

ORIGINAL REFERENCE NO.: 126:58517a,58520a

TITLE: Effects of NeemAzal on vitality and fertility of

Melolontha hippocastani

AUTHOR(S): Rohde, Martin

CORPORATE SOURCE: Hessische Landesanstalt fur Forsteinrichtung, Waldforschung und Waldokologie, Hann-Munden, D

34346,

Germany

SOURCE: Practice Oriented Results on Use and

Production of

Neem-Ingredients and Pheromones, Proceedings

of the

Workshop, 5th, Wetzlar, Germany, Jan. 22-25,

1996 (

1997), Meeting Date 1996, 75-80. Editor(s):

& Kleeberg, Hubertus; Zebitz, Claus P. W. Druck
 Graphic: Giessen, Germany.
 CODEN: 64HNA8

DOCUMENT TYPE: Conference
 LANGUAGE: English

AB During the flight period of *M. hippocastani*, it was tested in field and in combined field and laboratory studies whether NeemAzal could reduce damages by this species. Comparisons were made with chemical insecticides (Rubitox and Decis), biol. insecticides (*Beauveria brongniartii* blastospore suspension and ENVI-Repel garlic extract), and mech. methods (soil treatment with a rotary hoe). Under field conditions, NeemAzal had no immediate lethal effect on the beetles, but resulted in changes of behavior: defoliation decreased, the intake of food subsided completely after two to three days, the flight activity and the egg production was reduced, and the beetles did not look for protection against rain. Beetles forced to feeding on neem-treated leaves had no egg production under laboratory and controlled field conditions. ENVI-Repel did not show any repellent or disturbing effect. There were also no effects of *Beauveria brongniartii*. Rubitox and Decis showed an immediate lethal effect within 3-4 h which continued about 10 days. Thereby defoliation was reduced successfully. Neg. side effects on other arthropod species were only recognized the day after the treatment with Decis.

TI Effects of NeemAzal on vitality and fertility of *Melolontha hippocastani*

SO Practice Oriented Results on Use and Production of Neem-Ingredients and Pheromones, Proceedings of the Workshop, 5th, Wetzlar, Germany, Jan. 22-25, 1996 (1997), Meeting Date 1996, 75-80. Editor(s): Kleeberg, Hubertus; Zebitz, Claus P. W. Publisher: Druck & Graphic, Giessen, Germany.
 CODEN: 64HNA8

AB During the flight period of *M. hippocastani*, it was tested in field and in combined field and laboratory studies whether NeemAzal could reduce damages by this species. Comparisons were made with chemical insecticides (Rubitox and Decis), biol. insecticides (*Beauveria brongniartii* blastospore suspension and ENVI-Repel garlic extract), and mech. methods (soil treatment with a rotary hoe). Under field conditions, NeemAzal had no immediate lethal effect on the beetles, but resulted in changes of behavior: defoliation decreased, the intake of food subsided completely after two to three days, the flight activity and the egg production was reduced, and the beetles did not look for protection against rain. Beetles forced to feeding on neem-treated leaves had no egg production under laboratory and controlled field conditions. ENVI-Repel did not show any repellent or disturbing effect. There were also no effects of *Beauveria brongniartii*. Rubitox and Decis showed an immediate lethal effect within 3-4 h which continued about 10 days. Thereby defoliation was reduced successfully. Neg. side effects on other arthropod species were only recognized the day after the treatment with Decis.

ST NeemAzal insecticide Melolontha
 IT Insecticides
 (effects of NeemAzal on vitality and fertility of Melolontha
 hippocastani)

L13 ANSWER 11 OF 14 CAPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 1995:634743 CAPLUS Full-text
 DOCUMENT NUMBER: 123:32197
 ORIGINAL REFERENCE NO.: 123:5957a,5960a
 TITLE: Fertilizers which protect plants against heavy
 metals,
 isotopes and pesticides.
 INVENTOR(S): Korosi, Ferenc; Jezierska-Szabo, Elzbieta;
 Illes,
 Bela; Toth, Zoltan
 PATENT ASSIGNEE(S): Ponton Kft., Hung.
 SOURCE: PCT Int. Appl., 35 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9511205	A1	19950427	WO 1994-HU45	
19941021 <--				
W: AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, ES, FI, GB, JP, KP, KR, KZ, LK, LU, LV, MG, MN, MW, NL, NO, NZ, PL, PT, RO, RU, SD, SE, SK, UA, US, UZ, VN RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
AU 9510746	A	19950508	AU 1995-10746	
19941021 <--				
PRIORITY APPLN. INFO.:			HU 1993-2976	A
19931021 <--			WO 1994-HU45	W

19941021 <--
 AB The invention covers preps. serving as nutrient source for
 plants, while increasing plant tolerance to heavy metal and
 isotope absorption, as well as for reducing the pesticide volume
 needed for protection of the plants. The preps. contain soluble
 salts and/or complexes of physiol.-important macro and/or micro
 elements and/or the minerals containing such materials, as well as
 plant exts. containing biocide and/or repellent ingredients.
 TI Fertilizers which protect plants against heavy metals, isotopes
 and
 pesticides.

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE
 FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE

RE FORMAT

TI Fertilizers which protect plants against heavy metals, isotopes

and

pesticides.

PI WO 9511205 A1 19950427

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PI WO 9511205 A1 19950427 WO 1994-HU45

19941021 <--

W: AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, ES, FI,
GB, JP,

KP, KR, KZ, LK, LU, LV, MG, MN, MW, NL, NO, NZ, PL, PT,
RO, RU,

SD, SE, SK, UA, US, UZ, VN

RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL,
PT, SE,

BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG

AU 9510746 A 19950508 AU 1995-10746

19941021 <--

PRAI HU 1993-2976 A 19931021 <--

WO 1994-HU45 W 19941021 <--

AB The invention covers preps. serving as nutrient source for
plants, while increasing plant tolerance to heavy metal and
isotope absorption, as well as for reducing the pesticide volume
needed for protection of the plants. The preps. contain soluble
salts and/or complexes of physiol.-important macro and/or micro
elements and/or the minerals containing such materials, as well as
plant exts. containing biocide and/or repellent ingredients.

L13 ANSWER 12 OF 14 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1992:250529 CAPLUS Full-text

DOCUMENT NUMBER: 116:250529

ORIGINAL REFERENCE NO.: 116:42343a,42346a

TITLE: Enhanced insecticide compositions for
farming, forestry, and animal husbandry

INVENTOR(S): Fang, Zhizhong

PATENT ASSIGNEE(S): Peop. Rep. China

SOURCE: Faming Zhuanli Shenqing Gongkai Shuomingshu, 5
pp.

CODEN: CNXXEV

DOCUMENT TYPE: Patent

LANGUAGE: Chinese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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CN 1057159 A 19911225 CN 1991-105381

19910807 <--

PRIORITY APPLN. INFO.: CN 1991-105381

19910807 <--

AB The title enhanced insecticide compns. for a broad-spectrum
application consist of organophosphorus compds., organochlorine
compds., or chrysanthemic acid esters and an enhancer composition
containing Sophora flavescens root exts. and other medicinal plant
exts. Rates of the enhancement were 4-10-fold. The enhancer

composition enhanced the organic insecticide activity and decreased the environmental pollution due to reduced use of the organic insecticides.

TI Enhanced insecticide compositions for farming, forestry, and animal husbandry

TI Enhanced insecticide compositions for farming, forestry, and animal husbandry

PI CN 1057159 A 19911225

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	----	-----	-----	----
PI CN 1057159	A	19911225	CN 1991-105381	
19910807 <--				
PRAI CN 1991-105381		19910807 <--		
AB	The title enhanced insecticide compns. for a broad-spectrum application consist of organophosphorus compds., organochlorine compds., or chrysanthemic acid esters and an enhancer composition containing Sophora flavescens root exts. and other medicinal plant exts. Rates of the enhancement were 4-10-fold. The enhancer composition enhanced the organic insecticide activity and decreased the environmental pollution due to reduced use of the organic insecticides.			
ST	insecticide enhancer medicinal plant ext; Sophora root ext insecticide enhancer			

L13 ANSWER 13 OF 14 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1992:168344 CAPLUS Full-text

DOCUMENT NUMBER: 116:168344

ORIGINAL REFERENCE NO.: 116:28327a,28330a

TITLE: allicin-containing pesticide for golf course greens

INVENTOR(S): Sakai, Isao

PATENT ASSIGNEE(S): Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 3 pp.
CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	----	-----	-----	----
JP 04005211	A	19920109	JP 1990-101808	
19900419 <--				
PRIORITY APPLN. INFO.:			JP 1990-101808	
19900419 <--				
AB	The composition comprises garlic extract, containing allicin and proteins(no data) as major components, mixed with phytic acid, silicic acid, and water. This composition is nonpolluting. Thus, 40 g phytic acid and 10 g silicic acid sol were dissolved in 40 kg water, and into this were immersed 20 kg garlic roots for 6 days. The product was used as pesticide.			
TI	allicin-containing pesticide for golf course greens			
TI	allicin-containing pesticide for golf course greens			
PI	JP 04005211 A 19920109 Heisei			

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE

PI	JP 04005211	A	19920109	JP 1990-101808	
	19900419 <--				
PRAI	JP 1990-101808		19900419 <--		
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ST	golf course pesticide garlic phytate				
IT	Garlic (exts., pesticide containing phytate and silicate and, for golf course)				
IT	Pesticides (garlic exts. and phytate and silicate in, for golf course)				
IT	Turf (golf green, pesticides containing garlic exts . for)				
IT	83-86-3, Phytic acid 1343-98-2, Silicic acid RL: BIOL (Biological study) (pesticide containing garlic exts. and, for golf course)				

L13 ANSWER 14 OF 14 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1991:37810 CAPLUS Full-text

DOCUMENT NUMBER: 114:37810

ORIGINAL REFERENCE NO.: 114:6491a,6494a

TITLE: Control of cockroaches by compositions containing attractants and boric acid

INVENTOR(S): Honma, Takeshi

PATENT ASSIGNEE(S): System Maintenance K. K., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 4 pp.
CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE

	JP 02169505	A	19900629	JP 1988-322417	
	19881221 <--				
	PRIORITY APPLN. INFO.:			JP 1988-322417	
	19881221 <--				
AB	An insecticide against cockroaches consists of an insect attractant, a powdered carrier from plants, and H3BO3. The insect attract may be extracted from the root of onion and garlic. Thus, 6 g rice straws were pulverized to give a carrier. Onion (35 g) was squeezed to give 15 g juice which was used as an attractant. This attractant was mixed with the carrier, and kneaded with H3BO3				

15, flour 13, sugar 1, and milk 12 g, made into disks (20 g), and dried to give the insecticide.

TI Control of cockroaches by compositions containing attractants and boric acid

PI JP 02169505 A 19900629 Heisei

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	----	-----	-----	----
PI JP 02169505	A	19900629	JP 1988-322417	
19881221 <--				
PRAI JP 1988-322417		19881221 <--		

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ST cockroach attractant borate insecticide

IT Insecticides
(boric acid- and attractant-containing, for cockroaches)

IT Insect attractants
(cockroach insecticides containing boric acid and)

IT Garlic
Onion
(extract, insecticide containing, as attractant for cockroaches)

IT 10043-35-3, Boric acid, biological studies
RL: BIOL (Biological study)
(insecticide containing attractant and, for cockroaches)

=>

=> s 17 and 18
832 L7
381 L8
L14 115 L7 AND L8

=> s 114 and (garlic or allium)
11390 GARLIC
83 GARLICS
11415 GARLIC
(GARLIC OR GARLICS)
15384 ALLIUM
47 ALLIUMS
15390 ALLIUM
(ALLIUM OR ALLIUMS)

L15 103 L14 AND (GARLIC OR ALLIUM)

=> s 115 and (extract? or juice? or oil?)
377129 EXTRACT?
369802 EXT
250103 EXTs
551904 EXT
(EXT OR EXTs)

the I derivs. is qualitatively determined by using the above paper chromatographic procedures for I and II along with that for alliin (IV) (cf. loc. cit.), where IV and II derivs. are formed by the following reactions: The aqueous extract of the plants containing I derivative (supernatant of ground fresh material from centrifugation) + the alliinase obtained from garlic root by aqueous extraction and precipitation at pH 4 \rightarrow pyruvic acid + NH₃ + IV derivative; IV derivative + III (thiol form) at pH 8, 60°, 30 min. \rightarrow corresponding II derivative Of 10 species of the plants tested, I derivs. are found only in Liliaceae and Cruciferae; Me-I is most common. Et-I is detected only in Iperion uniform Rafinesque and Pr-I is widely available, and to some extent, in many Allium. Alliinase is found in Allium alone. A very quick absorption of Me-I through intestine membrane is demonstrated by determining urinary excretion of III after oral dosing of 10 mg. of Me-I.

II Allithiamine, a newly found derivative of vitamin B1. IV. The alliin

homologs in vegetables

SO Journal of Biochemistry (Tokyo, Japan) (1958), 45, 141-9
CODEN: JOBIAO; ISSN: 0021-924X

AB cf. C.A. 50, 12189e. For the detection of alliin (I) and allithiamine (II) derivs. paper chromatographic methods were devised. For I and its derivs. which are reactive with ninhydrin, 2 dimension development with phenol-ammonia (8:2) and then with BuOH-AcOH-H₂O (4:1:5) gives the R_f values: Me-I 0.55 and 0.15, Et-I 0.60 and 0.15, I 0.67 and 0.25, Pr-I 0.67 and 0.25, resp. The derivs. of II by the descending method with a BuOH-AcOH-H₂O mixture (4:1:5): II 0.85, Pr-II 0.85, Me-II 0.75, thiochrome 0.50, thiamine disulfide 0.35, thiamine (III) 0.30. The distribution of the I derivs. is qualitatively determined by using the above paper chromatographic procedures for I and II along with that for alliin (IV) (cf. loc. cit.), where IV and II derivs. are formed by the following reactions: The aqueous extract of the plants containing I derivative (supernatant of ground fresh material from centrifugation) + the alliinase obtained from garlic root by aqueous extraction and precipitation at pH 4 \rightarrow pyruvic acid + NH₃ + IV derivative; IV derivative + III (thiol form) at pH 8, 60°, 30 min. \rightarrow corresponding II derivative Of 10 species of the plants tested, I derivs. are found only in Liliaceae and Cruciferae; Me-I is most common. Et-I is detected only in Iperion uniform Rafinesque and Pr-I is widely available, and to some extent, in many Allium. Alliinase is found in Allium alone. A very quick absorption of Me-I through intestine membrane is demonstrated by determining urinary excretion of III after oral dosing of 10 mg. of Me-I.

IT Allium

(alliin homologs and alliinase in)

IT 59-43-8, Thiamine 59-58-5, Formamide,
N-[(4-amino-2-methyl-5-pyrimidinyl)methyl]-N-[4-hydroxy-1-methyl-

2-

(propyldithio)-1-butenyl]- 67-16-3, Formamide,

N,N'-[dithiobis[2-(2-hydroxyethyl)-1-methylvinylene]]bis[N-[(4-amino-2-

methyl-5-pyrimidinyl)methyl]- 92-35-3, Thiochrome 539-86-6,

Alliin 556-27-4, Alanine, 3-(allylsulfinyl)- 556-27-4

, Alliin 1948-52-3, 1-Propanesulfinic acid, thio-, S-propyl ester
 2281-20-1, Formamide, N-[(4-amino-2-methyl-5-pyrimidinyl)methyl]-
 N-[4-hydroxy-1-methyl-2-(methyldithio)-1-butenyl]- 13882-12-7,
 Methanethiol,
 methanesulfinic acid 17795-25-4, Alanine, 3-(propylsulfinyl)-
 17929-81-6,
 Alanine, 3-(ethylsulfinyl)- 32726-14-0, Alanine, 3-(
 methylsulfinyl)-
 114948-05-9, Ethanesulfinic acid, thio-, S-ethyl and S-Me esters
 (in vegetables)
 IT 9031-77-0, Alliin lyase
 (in Allium)

L18 ANSWER 36 OF 39 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1956:20483 CAPLUS Full-text
 DOCUMENT NUMBER: 50:20483
 ORIGINAL REFERENCE NO.: 50:4259b-d
 TITLE: The microbiological evaluation of the enzyme-substrate

system alliin-alliinase
 AUTHOR(S): Klein, P.; Souverein, C.
 CORPORATE SOURCE: Univ. Dusseldorf, Germany
 SOURCE: Biochemische Zeitschrift (1954), 326, 123-31
 CODEN: BIZEA2; ISSN: 0366-0753
 DOCUMENT TYPE: Journal
 LANGUAGE: Unavailable

AB The retardation of growth of various bacteria in dextrose-agar by
 allicin (I) was used to measure the conversion of alliin (II) to I
 by alliinase from garlic exts. The amount of I obtained from 1 g
 of crystalline II under maximum condition at pH 6.5 represented
 one alliinase unit. The amount of II converted to I was related
 to the concentration of the enzyme and was incomplete in the
 presence of surplus II. The enzyme was stable in the frozen state
 up to 4 wk.

TI The microbiological evaluation of the enzyme-substrate system
 alliin-alliinase

SO Biochemische Zeitschrift (1954), 326, 123-31
 CODEN: BIZEA2; ISSN: 0366-0753

AB The retardation of growth of various bacteria in dextrose-agar by
 allicin (I) was used to measure the conversion of alliin (II) to I
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 one alliinase unit. The amount of II converted to I was related
 to the concentration of the enzyme and was incomplete in the
 presence of surplus II. The enzyme was stable in the frozen state
 up to 4 wk.

IT Garlic
 (alliinase of)

IT 556-27-4, Alanine, 3-(allylsulfinyl)-
 (alliinase action on)

IT 539-86-6, Allicin
 (bactericidal or bacteriostatic activity of)

L18 ANSWER 37 OF 39 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1949:17823 CAPLUS Full-text
DOCUMENT NUMBER: 43:17823
ORIGINAL REFERENCE NO.: 43:3482d-h
TITLE: Allium compounds. II. Enzymic degradation of
alliine and the properties of alliinase
AUTHOR(S): Stoll, A.; Seebeck, E.
SOURCE: Helvetica Chimica Acta (1949), 32, 197-205
CODEN: HCACAV; ISSN: 0018-019X
DOCUMENT TYPE: Journal
LANGUAGE: German

GI For diagram(s), see printed CA Issue.

AB cf. C.A. 42, 4136g. Alliinase (I), a lyoenzyme, was extracted from Allium sativum and purified by precipitation at the isoelec. point (pH 4.0). I splits alliine (II) into allicin (III), pyruvic acid, and NH₃ according to the scheme: III has antibacterial properties. The optimum temperature for the reaction is 37°, the optimum pH between 5 and 8. Both solid and liquid I preps. are unstable and are adversely affected by heat and organic solvents. A purified I solution was prepared by finely grinding 100 g. fresh garlic with solid CO₂, adding 400 ml. H₂O, warming with steady stirring to 37°, stirring 20 min. at 37°, filtering by suction, refiltering through a Buchner funnel with talc, adding 21 ml. 10% AcOH with stirring, centrifuging, suspending the precipitate in 150 ml. water, adding 10% aqueous NH₃ to pH 6.4, filtering, acidifying with 10% AcOH to pH 4.0, centrifuging, and redissolving the enzyme in 400 ml. 1/15 M phosphate buffer (pH 6.4) with the addition of a little toluene. I splits over 80% II in 2 min., and the reaction is practically complete in 4 min. I did not affect cysteine.

TI Allium compounds. II. Enzymic degradation of alliine and the properties of alliinase

TI Allium compounds. II. Enzymic degradation of alliine and the properties of alliinase

SO Helvetica Chimica Acta (1949), 32, 197-205

CODEN: HCACAV; ISSN: 0018-019X

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IT Garlic

(alliinase from)

IT 556-27-4, Alanine, 3-(allylsulfinyl)- 556-27-4, Alliin
(enzymic degradation of)

IT 539-86-6P, Allicin
RL: PREP (Preparation)
(formation of, and antibacterial properties)

L18 ANSWER 38 OF 39 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1948:19336 CAPLUS Full-text
DOCUMENT NUMBER: 42:19336
ORIGINAL REFERENCE NO.: 42:4136g-i, 4137a-i
TITLE: Allium compounds. I. Alliine, the true
mother compound of garlic oil
AUTHOR(S): Stoll, Arthur; Seebeck, Ewald
CORPORATE SOURCE: "Sandoz", Basel, Switz.
SOURCE: Helvetica Chimica Acta (1948), 31, 189-210
CODEN: HCACAV; ISSN: 0018-019X
DOCUMENT TYPE: Journal
LANGUAGE: German

AB cf. C.A. 41, 4893a. The enzymic cleavage of the genuine base, alliine (I), of garlic oil to the intermediate allicine (II) is followed by decomposition into the volatile, unpleasantly odorous (CH₂:CHCH₂)₂S (III). The I content of Allium sativum is approx. parallel to the S content and both vary greatly according to the origin of the plant. Fresh bulbs (1 kg.) frozen in CO₂ were finely ground, suspended in 3 l. MeOH, warmed to 10° 1 hr., and filtered. The filtrate and washings (4 l. of 80% MeOH) were concentrated in vacuo to 200 cc. and defatted with ether. The bright yellow dry residue (62 g.) contained about 6% organic S. The residue (20 g.) in 80 cc. H₂O was vigorously stirred with 600 cc. alc. After standing 12 hrs. the sirupy residue was separated and dried in vacuo to a very hygroscopic powder (16 g.) which was digested in 150 cc. of ice-cold MeOH. The insol. fraction, washed with absolute MeOH and ether and dried over H₂SO₄, gave 7 g. of a white nonhygroscopic H₂O-soluble powder containing 11% organic S. The addition of 48 cc. acetone to 2 g. powder in 20 cc. H₂O produced 810 mg. I, fine needles, m. 163.5° (decomposition), [α]_D²¹ 62.7°, reduced in the presence of Raney Ni catalyst by saturation of the CH₂:CHCH₂ group to the corresponding dihydroalliine (IV), C₆H₁₃NO₃S, m. 164-8°, [α]_D²² 33.0° (c 1.0, H₂O). In contrast to II (C.A. 39, 323.9) I shows no antibacterial activity in the staphylococcal cup-plate test, though activity appears on cleavage with alliinase. Potentiometric titration showed I to be amphoteric. I gives a red color with alloxan and a pos. ninhydrin reaction. A Van Slyke determination showed the presence of an NH₂ group. Cold alkaline I gave no red color with Na₂Fe(CN)₅NO or with Grote's reagent (C.A. 25, 5876). On heating 2 min. a red color appeared, indicating the presence in I of S in an oxidized state. I oxidizes cysteine, H₂S, and AcSH, compds. containing free HS groups. I (2 g.) was shaken 2 hrs. with 5 cc. AcOH and 3 cc. AcSH. After 20 hrs. the crystallization of free S was complete. Working up of the filtrate and recrystn. from MeOH and ether yielded 2 g. of L-S-allyl-N-acetylcysteine (V), C₈H₁₃NO₃S, m. 120-2°, [α]_D²¹ -34.0° (c 1.0, MeOH), cleaved by alkaline hydrolysis to NH₃, AcOH, AcCO₂H, and CH₂:CHCH₂SH (as shown by the formation of PrSH from the alkaline hydrolysis of L-S-propyl-N-acetylcysteine). The constitution of V was further demonstrated by synthesis from L-cysteine. The dry double salt from 2.4 g. L-cysteine-HCl and 8 g. HgCl₂ in 50 cc. alc. was

treated with 30 g. $\text{CH}_2\text{:CHCH}_2\text{Br}$ at 60° 30 min. and the product was poured into 150 cc. H_2O . The excess $\text{CH}_2\text{:CHCH}_2\text{Br}$ was extracted with ether and the alc. removed by evaporation to 50 cc. in vacuo. The crude concentrate in 50 cc. H_2O at 70° was saturated with H_2S 20 min. and the reaction mixture boiled, filtered, concentrated to 50 cc., and neutralized with NH_4OH . After concentration and treating with excess absolute alc., the crude product, recrystd. from 6 cc. of 50% alc., yielded 670 mg. leaflets of L-S-allylcysteine (desoxoalliine) (VI), $\text{C}_6\text{H}_{11}\text{NO}_2\text{S}$, m. $218-19^\circ$, $[\alpha]_{\text{D}21} -16.0^\circ$ (c 1.0, H_2O), identical with VI prepared by reducing I with $\text{Na}_2\text{S}_2\text{O}_5$. Accordingly, I may be regarded as an S-allylcysteine sulfoxide, $\text{CH}_2\text{:CHCH}_2\text{SOCH}_2\text{CH}(\text{NH}_2)\text{CO}_2\text{H}$, crystallizing with 0.5 H_2O . For chemical characterization were prepared N-acetylalliine brucine salt, $\text{C}_{31}\text{H}_{39}\text{N}_3\text{O}_8\text{S}$, m. $188-98^\circ$ (decomposition), $[\alpha]_{\text{D}21} -29.0^\circ$; N-benzoylalliine, $\text{C}_{13}\text{H}_{15}\text{NO}_4\text{S}$, m. $152-3.5^\circ$, $[\alpha]_{\text{D}20} -6.0^\circ$ (c 1, MeOH); N-(p-nitrobenzoyl)alliine, $\text{C}_{13}\text{H}_{14}\text{N}_2\text{O}_6\text{S}$, m. $180-2^\circ$ (decomposition), $[\alpha]_{\text{D}20} -9.0^\circ$ (c 1.0, 0.1 N NaOH) (Me ester, m. $140-3^\circ$). I (1.1 g.) in 8 cc. H_2O and 3 cc. of 2 N NaOH was shaken vigorously 15 min. with 0.44 cc. PhNCS and the filtered solution acidified with dilute HCl to Congo red. Recrystn. from alc. yielded 1.45 g. prismatic (anilinoformyl)alliine, $\text{C}_{13}\text{H}_{16}\text{N}_2\text{O}_4\text{S}$, m. $141-3^\circ$ (decomposition), $[\alpha]_{\text{D}21} 76.0^\circ$ (c 1, MeOH), hydrolyzed by 2 N NaOH at room temperature to PhNHCONH_2 and AcCO_2H , and catalytically reduced in MeOH in the presence of Raney Ni to (anilinoformyl)dihydroalliine, $\text{C}_{13}\text{H}_{18}\text{N}_2\text{O}_4\text{S}$, m. $157.0-8.5^\circ$, $[\alpha]_{\text{D}21} 44.0^\circ$ (c 1.0, MeOH), also prepared from PhNCS and IV. The H_2O_2 oxidation of the model substance, $(\text{CH}_2\text{:CHCH}_2)_2\text{S}$, to the corresponding sulfoxide shows that S combined with an allyl group has a greater tendency to oxidation than the unsatd. linkage. The oxidation of 500 mg. VI in 8 cc. AcOH with 0.3 cc. of 36% H_2O_2 at 10° 1 hr. and at room temperature 5 hrs. gave, on working up in acetone, an S-allylcysteine sulfoxide (Ia), $\text{C}_6\text{H}_{11}\text{NO}_3\text{S} \cdot 0.5\text{H}_2\text{O}$, m. $146-8^\circ$ (decomposition), $[\alpha]_{\text{D}20} -12.0^\circ$ (c 1.0, H_2O), in contrast to I, m. $163-5^\circ$, $[\alpha]_{\text{D}21} 52.7^\circ$. According to Phillips (C.A. 20, 397, sulfoxides of this type have a semipolar linkage and consequently Ia differs from I in containing a new asym. center at the S atom which exists in the racemic form. Oxidation of L-S-propylcysteine (prepared from L-cysteine-HBr and PrBr in 2 N NaOH and alc. at 25°) with 36% H_2O_2 and crystallization from dilute acetone yielded fine needles of a similarly S-racemic IV, m. $150-3^\circ$, $[\alpha]_{\text{D}20} -12.0^\circ$ (c 1.0, H_2O). Attempts to resolve Ia into its active components are in progress.

TI Allium compounds. I. Alliine, the true mother compound of garlic oil

TI Allium compounds. I. Alliine, the true mother compound of garlic oil

SO Helvetica Chimica Acta (1948), 31, 189-210
CODEN: HCACAV; ISSN: 0018-019X

AB cf. C.A. 41, 4893a. The enzymic cleavage of the genuine base, alliine (I), of garlic oil to the intermediate allicine (II) is followed by decomposition into the volatile, unpleasantly odorous $(\text{CH}_2\text{:CHCH}_2)_2\text{S}$ (III). The I content of Allium sativum is approx. parallel to the S content and both vary greatly according to the origin of the plant. Fresh bulbs (1 kg.) frozen in CO_2 were finely ground, suspended in 3 l. MeOH, warmed to 10° 1 hr., and

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N NaOH at room temperature to PhNHCONH₂ and AcCO₂H, and catalytically reduced in MeOH in the presence of Raney Ni to (anilinoformyl)dihydroalliine, C₁₃H₁₈N₂O₄S, m. 157.0-8.5°, [α]_D²¹ 44.0° (c 1.0, MeOH), also prepared from PhNCS and IV. The H₂O₂ oxidation of the model substance, (CH₂:CHCH₂)₂S, to the corresponding sulfoxide shows that S combined with an allyl group has a greater tendency to oxidation than the unsatd. linkage. The oxidation of 500 mg. VI in 8 cc. AcOH with 0.3 cc. of 36% H₂O₂ at 10° 1 hr. and at room temperature 5 hrs. gave, on working up in acetone, an S-allylcysteine sulfoxide (Ia), C₆H₁₁NO₃S.0.5H₂O, m. 146-8° (decomposition), [α]_D²⁰ -12.0° (c 1.0, H₂O), in contrast to I, m. 163-5°, [α]_D²¹ 52.7°. According to Phillips (C.A. 20, 397, sulfoxides of this type have a semipolar linkage and consequently Ia differs from I in containing a new asym. center at the S atom which exists in the racemic form. Oxidation of L-S-propylcysteine (prepared from L-cysteine-HBr and PrBr in 2 N NaOH and alc. at 25°) with 36% H₂O₂ and crystallization from dilute acetone yielded fine needles of a similarly S-racemic IV, m. 150-3°, [α]_D²⁰ -12.0° (c 1.0, H₂O). Attempts to resolve Ia into its active components are in progress.

- IT Oils
 (garlic, alliin from)
- IT 556-27-4, Alanine, 3-(allylsulfinyl)-
 (alliin identity with)
- IT 539-86-6P, Allicin
 RL: PREP (Preparation)
 (formation of)
- IT 556-27-4P, Alanine, 3-(allylsulfinyl)- 21593-77-1P, Alanine,
 3-(allylthio)- 23127-41-5P, Alanine, N-acetyl-3-(allylthio)-, L-
 858203-33-5P, Hydantoic acid, 5-phenyl-2-[(propylsulfinyl)methyl]-
 860251-83-8P, Hydantoic acid, 2-[(allylsulfinyl)methyl]-5-phenyl-
 903507-32-4P, Alanine, N-acetyl-3-(allylsulfinyl)-, brucine salt
 903507-32-4P, Brucine, compound with N-acetyl-β-
 (allylsulfinyl)alanine
 903507-32-4P, Alliin, N-acetyl-, brucine salt 903509-25-1P,
 Alanine,
 3-(allylsulfinyl)-N-p-nitrobenzoyl-, methyl ester 903509-25-1P,
 Alliin,
 N-p-nitrobenzoyl-, methyl ester 903509-27-3P, Alliin, N-benzoyl-
 903509-27-3P, Alliin, N-p-nitrobenzoyl- 903509-27-3P, Alanine,
 3-(allylsulfinyl)-N-p-nitrobenzoyl- 903509-29-5P, Alanine,
 3-(allylsulfinyl)-N-benzoyl-
 RL: PREP (Preparation)
 (preparation of)
- IT 556-27-4, Alliin
 (β-(allylsulfinyl)alanine as structure for)

L18 ANSWER 39 OF 39 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1947:24440 CAPLUS Full-text
 DOCUMENT NUMBER: 41:24440
 ORIGINAL REFERENCE NO.: 41:4893a-b
 TITLE: Alliin, the pure mother substance of garlic
 oil
 AUTHOR(S): Stoll, A.; Seebeck, E.
 CORPORATE SOURCE: Sandoz, Basel, Switz.
 SOURCE: Experientia (1947), 3, 114-15

CODEN: EXPEAM; ISSN: 0014-4754

DOCUMENT TYPE: Journal

LANGUAGE: German

AB Alliin, a characteristic substance of certain garlics (*Allium sativum*, *A. ursinum*, and *A. triquetrum*) was crystallized from dilute alc. in fine bushy colorless crystals, m. 163-5°; $[\alpha]_{D21}^{25} 62.8^\circ$ (c,2). Empirical formula is $C_{12}H_{24}O_7N_2S_2$. Alliin is nonbactericidal, but a specific enzyme present in garlic causes the formation of allicin, which is highly bactericidal. Further decomposition yields volatile, highly odorous, allyl sulfides.

TI Alliin, the pure mother substance of garlic oil

TI Alliin, the pure mother substance of garlic oil

SO *Experientia* (1947), 3, 114-15

CODEN: EXPEAM; ISSN: 0014-4754

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IT Sulfides

(allyl, from garlic oil)

IT Oils

(garlic, alliin from)

IT 539-86-6P, Allicin

RL: PREP (Preparation)

(formation of)

IT 556-27-4P, Alanine, 3-(allylsulfinyl)- 556-27-4P, Alliin

RL: PREP (Preparation)

(preparation of)

=> s (13-18)

1095 L3

1108 L4

480 L5

104 L6

832 L7

381 L8

L19 2878 ((L3 OR L4 OR L5 OR L6 OR L7 OR L8))

=> s (13 and 14 and 15 and 16 and 17 and 18)

1095 L3

1108 L4

480 L5

104 L6

832 L7

381 L8

L20 4 (L3 AND L4 AND L5 AND L6 AND L7 AND L8)

=> d l20 ibib abs ti hit 4

L20 ANSWER 4 OF 4 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1992:166029 CAPLUS Full-text

DOCUMENT NUMBER: 116:166029

ORIGINAL REFERENCE NO.: 116:27839a,27842a
TITLE: Inhibition of whole blood platelet-aggregation
by
compounds in garlic clove extracts and
commercial
garlic products
AUTHOR(S): Lawson, Larry D.; Ransom, Dennis K.; Hughes,
Bronwyn
G.
CORPORATE SOURCE: Madaus Murdock, Inc., Springville, UT, 84663,
USA
SOURCE: Thrombosis Research (1992), 65(2), 141-56
CODEN: THBRAA; ISSN: 0049-3848

DOCUMENT TYPE: Journal
LANGUAGE: English

AB The inhibitory effects of adenosine and a number of quant.
determined organosulfur compds. derived from garlic cloves or com.
garlic prepns. on collagen-stimulated in vitro platelet
aggregation in whole blood determined An estimation of the
antiaggregatory activity of several brands of the major types of
com. garlic prepns. was determined from the activities of the
individual compds. present in each sample. In platelet-rich
plasma (PRP) most of the antiaggregatory activity of garlic clove
homogenates was due to adenosine; however, in whole blood neither
adenosine nor the polar fraction had any effect, and all of the
antiaggregatory activity was due to allicin and other
thiosulfinates. Allicin was equally active in whole blood and
PRP. Among garlic brands, there was a several-fold variation in
content of the organosulfur compds. and activity for all types of
garlic procedure tested. The best garlic powder tablets were
equally as active as clove homogenates, whereas steam-distilled
oils were 35% as active and oil-macerates (due to low content)
were only 12% as active. A garlic product aged many months in
aqueous alc. had no activity. For steam-distilled oils, most of
the activity was due to diallyl trisulfide. For the oil-
macerates, most of the activity was due to the vinyl dithiins.
Ajoene, an exclusive component of the oil-macerates, had highest
specific activity of all the compds. tested but, because of its
low concns., accounted for only 13% of the activity of diallyl
trisulfide and 3% of the activity of allicin in the product.
Compds. which may be active in vivo are discussed.

TI Inhibition of whole blood platelet-aggregation by compounds in
garlic

clove extracts and commercial garlic products
IT 58-61-7, Adenosine, biological studies 118-00-3, Guanosine,
biological
studies 539-86-6, Allicin 556-27-4, Alliin
592-88-1, Diallyl sulfide 624-92-0, Dimethyl disulfide
2050-87-5, Diallyl trisulfide 2179-57-9, Diallyl
disulfide 2179-58-0, Methyl allyl disulfide 2444-49-7, Diallyl
tetrasulfide 3658-80-8, Dimethyl trisulfide 5756-24-1,
Dimethyl
tetrasulfide 10152-76-8, Methyl allyl sulfide 21593-77-1,
S-Allylcysteine 34135-85-8, Methyl allyl trisulfide 62488-53-3
80028-57-5 90195-83-8, Methyl allyl tetrasulfide 92284-99-6
92285-00-2 118023-99-7, Methyl allyl pentasulfide 118686-45-6,
Diallyl

pentasulfide 140220-12-8

RL: BIOL (Biological study)

(blood platelet aggregation inhibition by, as garlic component)